

# Petroleum Supply Monthly

with data for October 2017

December 2017

















### **Preface**

The Petroleum Supply Monthly (PSM) is the monthly component of a series of three publications produced by the Office of Petroleum and Biofuels Statistics of the U.S. Energy Information Administration (EIA). The other two components are the Weekly Petroleum Status Report (WPSR) and the Petroleum Supply Annual (PSA). Together these publications present comprehensive petroleum and biofuel supply data on a weekly, monthly and annual basis.

Data presented in the PSM describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD)District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply. Included are: petroleum refiners, motor gasoline blenders, oxygenate producers, operators of natural gas processing plants and fractionators, inter-PAD District transporters, importers, and major inventory holders of crude oil, petroleum products, and biofuels. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

#### Scope of data

The PSM presents statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District levels, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources including federal and state agencies.

#### **Sections**

- U.S. supply and disposition of crude oil, petroleum products, and biofuels
- Regional supply and disposition of crude oil, petroleum products, and biofuels
- Crude oil supply and disposition and production by state
- Natural Gas Processing
- Refinery Operations
- Imports of residual fuel oil by state of entry
- Imports by PADD
- Imports by country of origin
- Exports
- Net imports
- Stocks
- Movements of crude oil, petroleum products, and biofuels

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Table 1. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels)

		T	Supply				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjust- ments <sup>1</sup>	Stock Change <sup>2</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>3</sup>	Ending Stocks
Crude Oil <sup>4</sup>	298,732			235,946	2,197	-14,677	497,893	53,659	0	1,128,013
Hydrocarbon Gas Liquids	122,993	-686	16,109	5.469		2,029	18,346	44,428	79,082	231,774
Natural Gas Liquids	122,993	-686	7,235	4,692		2,370	18,346	44,428	69,090	225,222
Ethane			164	_		5,173		4,520	38,494	58,630
Propane			9,397	3,574		-104		32,595	19,759	71,455
Normal Butane			-2,327	826		-1,211	6,605	3,498	185	62,970
Isobutane			1	290		317	6,500	16	4,061	10,575
Natural Gasoline	14,510	-686		2		-1,805	5,241	3,798	6,592	21,592
Refinery Olefins			8,874	777		-341			9,992	6,552
Ethylene			19	_		0			19	0
Propylene			9,022	456		-290			9,768	4,944
Butylene			-191	321		-56			186	1,571
Isobutylene			24	_		5			19	37
Other Liquids		38,007		36,159	4,902	-8,919	74,113	13,791	83	310,640
Other Hydrocarbons		38,011		1,100	3,002	-77	37,626	4,564	0	28,255
Hydrogen				-,	6,983		6,983		0	
Oxygenates (excluding Fuel Ethanol)		2,451		211	-471	76	-	2,115	0	1,488
Renewable Fuels (including Fuel Ethanol)		35,560		842	-3,501	-167	30,620	2,448	0	26,736
Fuel Ethanol <sup>5</sup>		32.076		69	-1,081	89	28,744	2,231	0	21,574
Renewable Fuels Except Fuel Ethanol		3,484		773	-2,420	-256	1,876	217	0	5,162
Other Hydrocarbons				47	-10	14	23	_	0	31
Unfinished Oils				20,724		-580	14,354	6,867	83	88,592
Motor Gasoline Blend.Comp. (MGBC) <sup>5</sup>		-4		14,335	1,901	-8,261	22,132	2,361	0	193,783
Reformulated		_		4,978	8,952	266	13,656	8	0	46,220
Conventional		-4		9,357	-7,051	-8,527	8,476	2,353	0	147,563
Aviation Gasoline Blend. Comp				-		-1	1	-	0	10
Finished Petroleum Products		140	607 730	01 000	1 660	10 556		110 100	E24 922	272 700
		-	607,739	21,923	1,663	<b>-13,556</b> 1,389		110,188	534,833	272,799
Finished Motor Gasoline		140	313,509 102,373	1,020	-820 -9,028	1,369		22,707	289,753 93,344	23,154 44
Conventional		140	211,136	1,020	8,208	1,388		22,707	196,409	23,110
Finished Aviation Gasoline		140	290	1,020	0,200	1,300		22,707	294	923
Kerosene-Type Jet Fuel			49,935	7,145		-892		4,872	53,100	42.428
Kerosene			185	315		247		209	33,100	1,954
Distillate Fuel Oil <sup>5</sup>			154,202	4,139	2,483	-7,576		45,453	122,947	129,885
15 ppm sulfur and under			144,162	3,424	2,483	-6,166		38,871	117,364	112,787
Greater than 15 ppm to 500 ppm sulfur			2,915	42	2,400	-15		2,750	222	7,068
Greater than 500 ppm sulfur			7,125	673		-1,395		3,831	5,362	10,030
Residual Fuel Oil <sup>6</sup>			14,090	4,674		-3,405		10,921	11,248	32,476
Less than 0.31 percent sulfur			1,634	_		-1,249		NA	NA	2,858
0.31 to 1.00 percent sulfur			1,630	819		-793		NA	NA	6,362
Greater than 1.00 percent sulfur			10,826	3,855		-1,363		NA	NA	23,250
Petrochemical Feedstocks			8,684	1,471		29			10,126	3,010
Naphtha for Petro. Feed. Use			5,431	1,339		66			6,704	2,026
Other Oils for Petro. Feed. Use			3,253	132		-37			3,422	984
Special Naphthas			1,285	509		19			1,775	982
Lubricants			5,660	1,087		-129		3,041	3,835	9,483
Waxes			125	159		-23		139	168	727
Petroleum Coke			26,703	522		-505		22,149	5,581	7,796
Marketable			19,620	522		-505		22,149	-1,502	7,796
Catalyst			7,083						7,083	
Asphalt and Road Oil			9,763	871		-2,836		677	12,793	19,272
Still Gas			20,471						20,471	
Miscellaneous Products			2,837	3		122		22	2,696	709
Total	421,725	37,461	623,848	299,497	8,762	-35,123	590,352	222,067	613,998	1,943,226

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

<sup>1</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January

<sup>2005 (</sup>see explanatory notes).

Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

6 Total residual fuel oil and in a dark.

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA

Table 2. U.S. Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels)

(Thousand Barrels)	Supply Disposition									
		<u> </u>	Supply				DISDO	SILION		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjust- ments <sup>1</sup>	Stock Change <sup>2</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>3</sup>	Ending Stocks
Crude Oil <sup>4</sup>	2,790,407			2,417,839	71,281	-51,401	5,015,917	315,011	0	1,128,013
Hydrocarbon Gas Liquids	1,120,102	-6,569	208,351	55,716		31,626	161,331	416,195	768,448	231,774
Natural Gas Liquids		-6,569	123,958	46,876		34,419	161,331	416,195	672,422	225,222
Ethane			1,545	_		7,943		51,202	360,231	58,630
Propane			91,970	37,134		-5,665		271,097	230,636	71,455
Normal Butane			31,360	4,047		33,131	44,653	38,838	11,264	62,970
Isobutane			-917	2,964		2,450	64,319	1,301	40,304	10,575
Natural Gasoline		-6,569		2,731		-3,440	52,359	53,757	29,987	21,592
Refinery Olefins			84,393	8,840		-2,793			96,026	6,552
Ethylene			208	6 906		-2,032			208 94,386	0 4,944
Propylene Butylene			85,548 -1,600	6,806 2,034		-2,032			1,232	1,571
Isobutylene			237	2,034		37			200	37
Other Liquids Hydrogen/Oxygenates/Renewables/		364,263		398,933	24,808	-7,466	647,936	144,914	2,620	310,640
Other Hydrocarbons		364,304		17,474	33,437	-147	366,676	48,685	0	28,255
Hydrogen				- 17,474	66,830		66,830	+0,000	0	20,200
Oxygenates (excluding Fuel Ethanol)		21,447		3,203	-3,834	11	318	20,487	0	1,488
Renewable Fuels (including Fuel Ethanol)		342,857		14,061	-29,715	-172	299,177	28,198	Ö	26,736
Fuel Ethanol <sup>5</sup>		311,982		1,328	-5,674	2,043	279,540	26,053	0	21,574
Renewable Fuels Except Fuel Ethanol		30,875		12,733	-24,041	-2,215	19,637	2,144	0	5,162
Other Hydrocarbons				210	155	14	351	_	0	31
Unfinished Oils				188,172		8,010	102,684	74,786	2,692	88,592
Motor Gasoline Blend.Comp. (MGBC) <sup>5</sup>		-41		193,287	-8,629	-15,330	178,505	21,442	0	193,783
Reformulated		-1		65,982	51,997	-5,929	123,827	80	0	46,220
Conventional		-40		127,305	-60,626	-9,401	54,678	21,362	0	147,563
Aviation Gasoline Blend. Comp				_		1	71	_	-72	10
Finished Petroleum Products		1,041	5,950,849	203,405	39,189	-56,872		998,191	5,253,166	272,799
Finished Motor Gasoline		1,041	3,017,400	10,412	14,302	-5,456		206,600	2,842,011	23,154
Reformulated		- 1,011	988,444	- 10,112	-45,937	-3			942,510	44
Conventional		1,041	2,028,956	10,412	60,239	-5,453		206,600	1,899,501	23,110
Finished Aviation Gasoline			3,248	96		-71			3,415	923
Kerosene-Type Jet Fuel			515,862	48,322		-348		56,849	507,683	42,428
Kerosene			1,537	1,167		-307		1,500	1,511	1,954
Distillate Fuel Oil <sup>5</sup>			1,507,742	40,065	24,887	-35,571		417,844	1,190,421	129,885
15 ppm sulfur and under			1,406,926	27,187	24,887	-30,233		353,720	1,135,513	112,787
Greater than 15 ppm to 500 ppm sulfur			34,753	386		-1,754		35,267	1,626	7,068
Greater than 500 ppm sulfur			66,063	12,492		-3,584		28,858	53,281	10,030
Residual Fuel Oil <sup>6</sup>			132,802	56,503		-9,067		92,536	105,836	32,476
Less than 0.31 percent sulfur			16,865	3,543		-613		NA	NA	2,858
0.31 to 1.00 percent sulfur			16,151	6,386		-2,710		NA	NA NA	6,362
Greater than 1.00 percent sulfur  Petrochemical Feedstocks			99,786	46,574		-5,744 -230		NA	NA 108,140	23,250
Naphtha for Petro. Feed. Use			93,958 59,487	13,952 9,854		-230 15			69,326	3,010 2,026
Other Oils for Petro. Feed. Use			34,471	4,098		-245			38,814	984
Special Naphthas			11,079	4,329		-236			15,644	982
Lubricants			52,755	12,360		-2,892		34,496	33,511	9,483
Waxes			1,486	1,431		56		1,244	1,617	727
Petroleum Coke			273,161	2,892		813		181,490	93,750	7,796
Marketable			203,849	2,892		813		181,490	24,438	7,796
Catalyst			69,312						69,312	
Asphalt and Road Oil			102,608	11,839		-3,594		5,286	112,755	19,272
Still Gas			208,731						208,731	
Miscellaneous Products			28,480	37		31		345	28,141	709
Total	3,910,509	358,735	6,159,200	3,075,893	135,278	-84,113	5,825,184	1,874,311	6,024,233	1,943,226

<sup>=</sup> Not Applicable

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

<sup>1</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol,

and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve 

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change. Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA

Table 3. U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels per Day)

			Supply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjust- ments <sup>1</sup>	Stock Change <sup>2</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>3</sup>
Crude Oil <sup>4</sup>	9,637			7,611	71	-473	16,061	1,731	0
Hydrocarbon Gas Liquids	3,968	-22	520	176		65	592	1,433	2,551
Natural Gas Liquids		-22	233	151		76	592	1,433	2,229
Ethane			5	_		167		146	1,242
Propane	, -		303	115		-3		1,051	637
Normal Butane			-75	27		-39	213	113	6
Isobutane			0	9		10	210	1	131
Natural Gasoline		-22 	286	0 25		-58 -11	169	123	213 322
Refinery Olefins Ethylene			200	25		-11			322
Propylene			291	15		-9			315
Butylene			-6	10		-2			6
Isobutylene			1	-		0			1
Other Liquids		1,226		1,166	158	-288	2,391	445	3
Other Hydrocarbons		1,226		35	97	-2	1,214	147	0
Hydrogen				-	225		225	-	0
Oxygenates (excluding Fuel Ethanol)		79		7	-15	2	_	68	0
Renewable Fuels (including Fuel Ethanol)		1,147		27	-113	-5	988	79	0
Fuel Ethanol <sup>5</sup>		1,035		2	-35	3	927	72	0
Renewable Fuels Except Fuel Ethanol		112		25	-78	-8	61	7	0
Other Hydrocarbons				2	0	0	1	-	0
Unfinished Oils		 0		669 462	 61	-19 -266	463 714	222 76	3
Reformulated		0		161	289	-200	441	76	0
Conventional		0		302	-227	-275	273	76	0
Aviation Gasoline Blend. Comp.				-		0	0	-	0
Finished Petroleum Products		5	19,604	707	54	-437		3,554	17,253
Finished Motor Gasoline		5	10,113	33	-26	45		732	9,347
Reformulated		-	3,302	-	-291	0		-	3,011
Conventional		5	6,811	33	265	45		732	6,336
Finished Aviation Gasoline			9	0		0		-	9
Kerosene-Type Jet Fuel			1,611	230		-29		157	1,713
Kerosene			6	10		8		1 100	1
Distillate Fuel Oil <sup>5</sup>			4,974 4,650	134 110	80 80	-244 -199		1,466 1,254	3,966 3,786
Greater than 15 ppm to 500 ppm sulfur			94	110		-199		1,254	3,760
Greater than 500 ppm sulfur			230	22		-45		124	173
Residual Fuel Oil <sup>6</sup>			455	151		-110		352	363
Less than 0.31 percent sulfur			53	-		-40		NA	NA
0.31 to 1.00 percent sulfur			53	26		-26		NA	NA
Greater than 1.00 percent sulfur			349	124		-44		NA	NA
Petrochemical Feedstocks			280	47		1			327
Naphtha for Petro. Feed. Use			175	43 4		2			216
Other Oils for Petro. Feed. Use			105 41	16		-1 1			110 57
Special Naphthas Lubricants			183	35		-4		98	124
Waxes			163	5		-4		4	5
Petroleum Coke			861	17		-16		714	180
Marketable			633	17		-16		714	-48
Catalyst			228						228
Asphalt and Road Oil			315	28		-91		22	413
Still Gas			660						660
Miscellaneous Products			92	0		4		1	87
Total	13,604	1,208	20,124	9,661	283	-1,133	19,044	7,163	19,806

<sup>=</sup> Not Applicable

<sup>=</sup> No Data Reported

NA = Not Available.

Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

5 Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix

D.

6 Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field

production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

4 Includes value for the Strategic Petroleum Reserve. See Table 13 for the breakout of Commercial Crude Oil.

Table 4. U.S. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels per Day)

(Thousand Barrels per Day)			Supply			Disposition						
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjust- ments <sup>1</sup>	Stock Change <sup>2</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>3</sup>			
Crude Oil <sup>4</sup>	9,179			7,953	234	-169	16,500	1,036	0			
Hydrocarbon Gas Liquids	3,685	-22	685	183		104	531	1,369	2,528			
Natural Gas Liquids	3,685	-22	408	154		113	531	1,369	2,212			
Ethane	1,374		-	_		26		168	1,185			
Propane	1,207		303	122		-19		892	759			
Normal Butane	304		103	13		109	147	128	37			
Isobutane  Natural Gasoline	350 449	 -22	-299 	10 9		-11	212 172	4 177	133 99			
Refinery Olefins		-22	278	29		-9			316			
Ethylene			1	_		ő			1			
Propylene			281	22		-7			310			
Butylene			-5	7		-3			4			
Isobutylene			475	-		0			1			
Other Liquids		1,198		1,312	82	-25	2,131	477	9			
Other Hydrocarbons		1,198		57	110	0	1,206	160	0			
Hydrogen				-	220		220	_	0			
Oxygenates (excluding Fuel Ethanol)		71		11	-13	0	1	67	0			
Renewable Fuels (including Fuel Ethanol)		1,128		46	-98	-1	984	93	0			
Fuel Ethanol <sup>5</sup> Renewable Fuels Except Fuel Ethanol		1,026 102		4 42	-19 -79	-7	920 65	86 7	0			
Other Hydrocarbons		102		42	-/9	-/	1	/	0			
Unfinished Oils				619		26	338	246	9			
Motor Gasoline Blend.Comp. (MGBC) <sup>5</sup>		0		636	-28	-50	587	71	0			
Reformulated		0		217	171	-20	407	0	0			
Conventional		0		419	-199	-31	180	70	0			
Aviation Gasoline Blend. Comp				-		0	0	-	0			
Finished Petroleum Products		3	19,575	669	129	-187		3,284	17,280			
Finished Motor Gasoline		3	9,926	34	47	-18		680	9,349			
Reformulated		3	3,251	34	-151 198	0 -18		680	3,100			
Conventional Finished Aviation Gasoline			6,674 11	0	198	-18		080	6,248 11			
Kerosene-Type Jet Fuel			1,697	159		-1		187	1,670			
Kerosene			5	4		-1		5	5			
Distillate Fuel Oil <sup>5</sup>			4,960	132	82	-117		1,374	3,916			
15 ppm sulfur and under			4,628	89	82	-99		1,164	3,735			
Greater than 15 ppm to 500 ppm sulfur			114	1		-6		116	5			
Greater than 500 ppm sulfur			217	41		-12		95	175			
Residual Fuel Oil <sup>6</sup>			437 55	186 12		-30 -2		304 NA	348 NA			
Less than 0.31 percent sulfur			53	21		-2 -9		NA NA	NA NA			
Greater than 1.00 percent sulfur			328	153		-19		NA NA	NA NA			
Petrochemical Feedstocks			309	46		-1			356			
Naphtha for Petro. Feed. Use			196	32		0			228			
Other Oils for Petro. Feed. Use			113	13		-1			128			
Special Naphthas			36	14		-1			51			
Lubricants			174	41		-10		113	110			
Waxes			5 899	5 10		0		4 597	5			
Petroleum Coke			671	10		3		597 597	308 80			
Catalyst			228						228			
Asphalt and Road Oil			338	39		-12		17	371			
Still Gas			687						687			
Miscellaneous Products			94	0		0		1	93			
Total	12,864	1,180	20,261	10,118	445	-277	19,162	6,165	19,817			

<sup>=</sup> Not Applicable

<sup>=</sup> No Data Reported

<sup>=</sup> Not Available.

Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

Appetitute 20 for a contract 20 for a contract adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

5 Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix

D.

6 Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field

production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

4 Includes value for the Strategic Petroleum Reserve. See Table 13 for the breakout of Commercial Crude Oil.

Table 5. PAD District 1 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels)

(Thousand barreis)			Suppl	y				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	1,749			32,208	3,500	-1,705	1,771	33,981	_	0	13,740
Hydrocarbon Gas Liquids	14,052	-15	511	1,264	153		1,046	1,568	3,957	9,394	9,922
Natural Gas Liquids		-15	152	1,019	-79		1,013	1,568	3,957	8,591	9,545
Ethane	5,847		_	_	_		-103		1,390	260	373
Propane			775	851	3,410		1,033		2,472	6,244	6,436
Normal Butane			-621	123	711		-179	966	15	820	2,146
Isobutane			-2	45	111		18	464	3	384	156
Natural Gasoline  Refinery Olefins		-15 	 359	245	-11		244 33	138	78 	882 803	434 377
Ethylene			11	245	_					11	377
Propylene			419	245	_		14			882	156
Butylene			-109		_		14			-123	184
Isobutylene			38	_	_		5			33	37
Other Liquids		1,058		14,488	56,947	5,430	-4,942	83,495	186	-816	63,697
Other Hydrocarbons		1,061		207	8,499	484	-802	10,889	164	0	8,302
Hydrogen				_	- 0,100	102		102	-	ő	
Oxygenates (excluding Fuel Ethanol)		_		_	-	1	_	_	1	0	_
Renewable Fuels (including Fuel Ethanol)		1,061		207	8,499	381	-802	10,787	163	0	8,302
Fuel Ethanol		864		69	8,331	1,047	-369	10,523	158	0	6,704
Renewable Fuels Except Fuel Ethanol		197		138	168	-667	-433	264	5	0	1,598
Other Hydrocarbons				_		_				_	
Unfinished Oils				1,182	-38		487	1,457	16	-816	5,379
Motor Gasoline Blend.Comp. (MGBC)		-3		13,099	48,486	4,946	-4,627	71,149	6 0	0	50,016
Reformulated  Conventional		-3		4,978 8,121	7,825 40,661	5,801 -856	1,311 -5,938	17,293 53,856	5	0	17,832 32,184
Aviation Gasoline Blend. Comp.				0,121	- 40,001		-5,950	-	_	-	-
Finished Petroleum Products		_	120,054	11,104	43,759	-5,326	-2,276		3,669	168,197	76,402
Finished Motor Gasoline		_	101,039	519	6,622	-5,993	43		100	100,197	4,205
Reformulated		_	40,759	- 0.0	- 0,022	-4,934	4		-	35,821	28
Conventional		_	60,280	519	6,622	-1,059	39		100	66,223	4,177
Finished Aviation Gasoline				1	905	Í	-5		-	911	129
Kerosene-Type Jet Fuel			2,952	3,619	13,009		-1,668		6	21,242	9,347
Kerosene			28	315	_		175		2	166	1,646
Distillate Fuel Oil <sup>6</sup>			10,655	3,462	20,985	667	1,360		1,362	33,047	48,348
15 ppm sulfur and under			9,154	2,983	19,049	667	1,204		1,190	29,459	38,802
Greater than 15 ppm to 500 ppm sulfur			-112	42	331		-260		171 0	350	4,552
Greater than 500 ppm sulfur Residual Fuel Oil <sup>7</sup>			1,613 1,219	437 2,436	1,605		416 -863		543	3,239 3,975	4,994 7,203
Less than 0.31 percent sulfur			1,219	2,430	_		-452		NA	NA	1,337
0.31 to 1.00 percent sulfur			405	653	_		-188		NA.	NA NA	1,303
Greater than 1.00 percent sulfur			629	1,783	-		-223		NA	NA	4,563
Petrochemical Feedstocks			133		-9		18			106	105
Naphtha for Petro. Feed. Use			133	_	_		18			115	105
Other Oils for Petro. Feed. Use			_	_	-9		_			-9	
Special Naphthas			21	_	_		-4			25	35
Lubricants			393		501		-15		270	794	916
Waxes			-8 1 121	77	808		-9		1 222	701	476
Petroleum Coke			1,121 400	3	808		_		1,232 1,232	-20	_
Catalyst			721						1,232	721	
Asphalt and Road Oil			1,221	517	937		-1,314		68	3,921	3,966
Still Gas			1,177							1,177	
Miscellaneous Products			103	-	-		6		13	84	26
Total	15,801	1,043	120,565	59,064	104,359	-1,602	-4,401	119,044	7,812	176,775	163,761

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

3 Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol,

and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus

adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

6 Evoludes etacks located in the "Neutral Part of the Part of

Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change. Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly

Table 6. PAD District 1 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels)

(Thousand Barrels)			Suppl	у				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	14,612			279,120	29,935	3,665	1,495	321,833	4,004	o	13,740
Hydrocarbon Gas Liquids	127,147	-148	10,608	14,113	-5,976		2,155	9,597	36,887	97,105	9,922
Natural Gas Liquids		-148	6,455	10,786	-8,803		2,037	9,597	36,887	86,916	-
Ethane	53,115		-	-	-		-67		11,447	897	_
Propane			6,648	9,684	28,278		581	4 600	15,293	71,248	_
Normal ButaneIsobutane			106 -299	516 586	2,273 1,588		1,274 -2	4,608 4,019	1,526 8	8,282 4,263	_
Natural Gasoline	-, -	-148	-299	360	-104		251	970	8,612		_
Refinery Olefins		-140	4,153	3,327	-104		118		0,012	10,189	_
Ethylene			137		_					137	_
Propylene			4,160	3,320	_		-3			10,310	_
Butylene			-619	7	-		84			-696	_
Isobutylene			475	-	-		37			438	-
Other Liquids		9,538		191,889	566,213	52,478	-9,412	831,023	12,217	-13,709	63,697
Other Hydrocarbons		9,568		5,804	93,890	-3,172	-808	106,052	847	0	8,302
Hydrogen				-	-	988		988	-	Ö	
Oxygenates (excluding Fuel Ethanol)		_		_	_	12	_	_	12	0	_
Renewable Fuels (including Fuel Ethanol)		9,568		5,802	93,890	-4,169	-808	105,064	835	0	8,302
Fuel Ethanol		7,975		100	92,621	2,273	418	101,794	757	0	6,704
Renewable Fuels Except Fuel Ethanol		1,593		5,702	1,270	-6,443	-1,226	3,270	78	0	1,598
Other Hydrocarbons				2	_	-2	_	-	-	0	
Unfinished Oils				19,434	-360		907	20,922	10,954	-13,709	5,379
Motor Gasoline Blend.Comp. (MGBC)		-30		166,651 65,456	472,683 82,238	55,650 28,430	-9,511 -1,791	704,049 177,910	416 5	0	50,016 17,832
Conventional		-30		101,195	390,445	27,220	-7,720	526,139	411	0	32,184
Aviation Gasoline Blend. Comp.				-	- 030,440		- 7,720	-	-	_	-
Finished Petroleum Products		-	1,166,577	94,929	452,256	-51,481	-26,357		53,241	1,635,397	76,402
Finished Motor Gasoline		_	981,912	8,073	69,751	-57,923	-1,287		2,946	1,000,154	4,205
Reformulated  Conventional		-	392,669 589,243	8,073	69,751	-20,921 -37,002	-3 -1,284		2,946	371,751 628,403	28
Finished Aviation Gasoline			509,243	44	11,325	-37,002	-1,264		2,940	11,404	4,177 129
Kerosene-Type Jet Fuel			27,501	19,078	133,769		-1,731		1,150	180,929	9,347
Kerosene			838	1,112	-		-125		644	1,431	1,646
Distillate Fuel Oil <sup>6</sup>			100,611	32,512	218,058	6,442	-18,603		24,286	351,940	48,348
15 ppm sulfur and under			85,482	22,686	200,073	6,442	-14,655		21,012	308,325	38,802
Greater than 15 ppm to 500 ppm sulfur			1,574	386	3,040		-1,836		3,170	3,666	4,552
Greater than 500 ppm sulfur			13,555	9,440	14,945		-2,112		103	39,949	4,994
Residual Fuel Oil <sup>7</sup>			13,834	22,791	349		-3,793		13,779	26,988	7,203
Less than 0.31 percent sulfur			3,462	1,209	-103		337		NA	NA	1,337
0.31 to 1.00 percent sulfur			4,032 6,340	3,452 18,130	-17 469		-1,340 -2,790		NA NA	NA NA	1,303 4,563
Greater than 1.00 percent sulfur  Petrochemical Feedstocks			1,156	18,130	-223		-2,790 -54		INA	996	105
Naphtha for Petro. Feed. Use			1,156	9	-223		-54			1,219	105
Other Oils for Petro. Feed. Use			- 1,100	_	-223		-			-223	-
Special Naphthas			206	-			13			193	35
Lubricants			3,957	2,215	5,011		-292		2,064	9,411	916
Waxes			36	742	9		99		691	-3	476
Petroleum Coke			10,457	216	5,200		_		6,784	9,089	_
Marketable			3,637	216	5,200		_		6,784	2,269	_
Catalyst			6,820	 0 127	0.007				 780	6,820	2 066
Asphalt and Road OilStill Gas			12,240 12,875	8,137	9,007		-538 		780	29,142 12,875	3,966
Miscellaneous Products			954				-11		117	848	26
Total	141,759	9,390	1,177,185	580,051	1,042,429	4,662		1,162,453	106,348		163,761
		· ·					·	•			

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

3 Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol,

and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus

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Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly

Table 7. PAD District 1 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels per Day)

(Thousand Barrels per Day)			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	56			1,039	113	-55	57	1,096	-	0
Hydrocarbon Gas Liquids	453	0	16	41	5		34	51	128	303
Natural Gas Liquids	453	0	5	33	-3		33	51	128	277
Ethane			_		_		-3		45	8
Propane			25 -20	27	110		33 -6		_ 0	201
Normal ButaneIsobutane	45 23		-20 0	4	23		-6	31 15	0	26 12
Natural Gasoline		0			0		8	4	3	28
Refinery Olefins			12	8	_		1			26
Ethylene			0	_	_		-			0
Propylene			14	8	7		0			28
Butylene			-4	_	-		0			-4
Sobutylene  Other Liquids		34		467	1,837	175	- <b>159</b>	2,693		-26
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons		34		7	274	16	-26	351	5	0
Hydrogen					2/4	3	-20	331	5	0
Oxygenates (excluding Fuel Ethanol)		_		_	_	0	_	_	0	0
Renewable Fuels (including Fuel Ethanol)		34		7	274	12	-26	348	5	0
Fuel Ethanol <sup>6</sup>		28		2	269	34	-12	339	5	0
Renewable Fuels Except Fuel Ethanol		6		4	5	-22	-14	9	0	0
Other Hydrocarbons				38	-1	_	- 16	- 47	1	-26
Motor Gasoline Blend.Comp. (MGBC) <sup>6</sup>		0		423	1,564	160	-149	2,295	0	-20
Reformulated		_		161	252	187	42	558	0	0
Conventional		0		262	1,312	-28	-192	1,737	0	0
Aviation Gasoline Blend. Comp				-	_		_	_	_	-
Finished Petroleum Products		_	3,873	358	1,412	-172	-73		118	5,426
Finished Motor Gasoline		-	3,259	17	214	-193	1		3	3,292
Reformulated		-	1,315		-	-159	0		_	1,156
Conventional			1,945	17 0	214 29	-34 	1 0		3	2,136 29
Kerosene-Type Jet Fuel			95	117	420		-54		0	685
Kerosene			1	10	-		6		0	5
Distillate Fuel Oil <sup>6</sup>			344	112	677	22	44		44	1,066
15 ppm sulfur and under			295	96	614	22	39		38	950
Greater than 15 ppm to 500 ppm sulfur			-4	1	11		-8		6	11
Greater than 500 ppm sulfur Residual Fuel Oil <sup>7</sup>			52 39	14 79	52		13 -28		0 18	104 128
Less than 0.31 percent sulfur			6	-	_		-28 -15		NA	NA
0.31 to 1.00 percent sulfur			13		_		-6		NA NA	NA NA
Greater than 1.00 percent sulfur			20	58	-		-7		NA	NA
Petrochemical Feedstocks			4	_	0		1			3
Naphtha for Petro. Feed. Use			4	-	_		1			4
Other Oils for Petro. Feed. Use			_ 1	_	0		_ 0			0
Special Naphthas Lubricants			13	5	16		0		9	26
Waxes			0	2	-		0		2	0
Petroleum Coke			36		26		-		40	23
Marketable			13	0	26		_		40	-1
Catalyst			23							23
Asphalt and Road Oil			39	17	30		-42		2	126
Still Gas Miscellaneous Products			38 3				 0			38
Total	510	34	3,889	1,905	3,366	-52	-142	3,840	252	5,702

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Indicates an adjustment for crude oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to a grade of the oil previously referred t

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).
 Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus

adjustments, minus stocks located in the "Northeast Heating Oil Reserve" (Northeast Regional Refined Petroleum Product Reserve") and "State of New York's Strategic Field Receipts, p

<sup>&</sup>lt;sup>6</sup> Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

<sup>&</sup>lt;sup>7</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil Lease Condensate, and Natural Gas Production Report," and data from State conservation accepted. LLS, Department of Interior, and the Rurgey of Ocean Energy.

Table 8. PAD District 1 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels per Day)

(Thousand Barrels per Day)			Sup	ply				Disposition			
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	
Crude Oil	48			918	98	12	5	1,059	13	0	
Hydrocarbon Gas Liquids	418	0	35	46	-20		7	32	121	319	
Natural Gas Liquids	418	0	21	35	-29		7	32	121	286	
Ethane	175		-	-	_		0		38	3	
Propane	140		22	32	93		2		_	234	
Normal Butane	42		0	2	7		4	15	5	27	
Isobutane Natural Gasoline	21 41	 0	-1 	2	5 0		0	13 3	0 28	14 7	
Refinery Olefins			14	11	_		0			34	
Ethylene			0	-	_		_			0	
Propylene			14	11	9		0			34	
Butylene			-2	0	-		0			-2	
Isobutylene			2	_	_		0			1	
Other Liquids		31		631	1,863	173	-31	2,734	40	-45	
Other Hydrocarbons		31		19	309	-10	-3	349	3	0	
Hydrogen				-	-	3		3	-	0	
Oxygenates (excluding Fuel Ethanol)		_		-	_	0	_	-	0	0	
Renewable Fuels (including Fuel Ethanol)		31		19	309	-14	-3	346	3	0	
Fuel Ethanol <sup>6</sup>		26 5		0 19	305 4	7 -21	-4	335 11	2	0	
Other Hydrocarbons				0	4	-21	-4	- 11	-	0	
Unfinished Oils				64	-1		3	69	36	-45	
Motor Gasoline Blend.Comp. (MGBC) <sup>6</sup>		0		548	1,555	183	-31	2,316	1	0	
Reformulated		_		215	271	94	-6	585	0	0	
Conventional		0	 	333	1,284 -	90	-25 -	1,731 -	1	0	
Finished Batuslassas Bundunta			0.007	010	4 400	100	0.7		475	5 000	
Finished Petroleum Products Finished Motor Gasoline		_	<b>3,837</b> 3,230	<b>312</b> 27	<b>1,488</b> 229	<b>-169</b> -191	<b>-87</b> -4		175 10	<b>5,380</b> 3,290	
Reformulated		_	1,292			-69	-4		-	1,223	
Conventional		_	1,938	27	229	-122	-4		10	2,067	
Finished Aviation Gasoline			_	0	37		0		_	38	
Kerosene-Type Jet Fuel			90	63	440		-6		4	595	
Kerosene			3 331	4 107	717	 21	0		2 80	5	
15 ppm sulfur and under			281	75	658	21	-61 -48		69	1,158 1,014	
Greater than 15 ppm to 500 ppm sulfur			5	1	10		-6		10	12	
Greater than 500 ppm sulfur			45	31	49		-7		0	131	
Residual Fuel Oil <sup>7</sup>			46	75	1		-12		45	89	
Less than 0.31 percent sulfur			11	4	0		1		NA	NA	
0.31 to 1.00 percent sulfur			13	11	0		-4		NA	NA	
Greater than 1.00 percent sulfur  Petrochemical Feedstocks			21 4	60 0	2		-9 0		NA 	NA 3	
Naphtha for Petro. Feed. Use			4	0	-1		0			4	
Other Oils for Petro. Feed. Use			_	_	-1		_			-1	
Special Naphthas			1	-	-		0			1	
Lubricants			13	7	16		-1		7	31	
Waxes			0	2	0		0		2	0	
Petroleum Coke			34 12	1	17 17		_		22 22	30 7	
Catalyst			22							22	
Asphalt and Road Oil			40	27	30		-2		3	96	
Still Gas			42							42	
Miscellaneous Products			3	_	-		0		0	3	
Total	466	31	3,872	1,908	3,429	15	-106	3,824	350	5,654	

<sup>-- =</sup> Not Applicable.

\_ = No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Indicates an adjustment for crude oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for grade oil previously referred to a grade of the oil previously referred t

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>6</sup> Excludes stocks located in the "Northeast Heating Oil Reserve" "Northeast Regional Refined Petroleum Product Reserve" and "State of New York's Strategic Fuels Reserve".

<sup>&</sup>lt;sup>6</sup> Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

<sup>&</sup>lt;sup>7</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil Lease Condensate and Natural Gas Production Report," and data from State conservation appraise. LLS, Department of Interior, and the Burgary of Ocean Energy.

Table 9. PAD District 2 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels)

(Thousand barreis)			Suppl	y				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	57,735			76,984	-16,469	-4,043	4,402	105,756	4,049	0	153,755
Hydrocarbon Gas Liquids	28,430	-627	2,528	2,374	-10,742		648	3,448	4,207	13,660	64,979
Natural Gas Liquids		-627	869	2,025	-10,111		428	3,448	4,207	12,503	63,361
Ethane	10,064		_		_		418		215	3,645	6,749
Propane			2,100	1,477	-6,861		522	1 075	128	6,160	26,150
Normal ButaneIsobutane	3,529 1,544		-1,137 -94	321 225	-1,017 10		-569 181	1,275 1,283	249 1	741 220	18,530 2,478
Natural Gasoline	,-	-627	-54	223	3,543		-124	890	3,615	1,736	9,454
Refinery Olefins		-027	1,659	349	5,545		220		5,015	1,157	1,618
Ethylene			,	-	_					-,	,0.0
Propylene			1,371	211	_		58			893	752
Butylene			288	138	_		162			264	866
Isobutylene			_	-	_		0			0	0
Other Liquids		31,567		455	-10,016	-3,649	-4,817	22,806	2,104	-1,735	61,710
Other Hydrocarbons		31,568		86	-17,577	-3,225	739	9,382	732	0	8,666
Hydrogen		´		-	, <u> </u>	1,174		1,174	-	0	
Oxygenates (excluding Fuel Ethanol)		1		_	_	0	0	-	1	0	7
Renewable Fuels (including Fuel Ethanol)		31,567		47	-17,577	-4,397	725	8,185	731	0	8,628
Fuel Ethanol		29,281		_	-16,725	-3,502	662	7,734	657	0	7,776
Renewable Fuels Except Fuel Ethanol		2,286		47	-851	-895	63	451	73	0	852
Other Hydrocarbons				39	-299	-2 	14 -831	23 1,077	1,190	-1,735	31 13.496
Motor Gasoline Blend.Comp. (MGBC)		-1		369	7,860	-425	-4,725	12,347	1,190	-1,735	39.548
Reformulated		-1		309	1,320	-593	-1,117	1,844	101	0	4,889
Conventional		-1		369	6,540	168	-3,608	10,503	181	ő	34,659
Aviation Gasoline Blend. Comp				-	_		_	-	_	-	_
Finished Petroleum Products		140	136,365	848	3,333	4,822	-6,083		2,195	149,396	52,284
Finished Motor Gasoline		140	80,277	040	169	3,927	230		140	84,143	6,309
Reformulated		140	11,423	_	-	781	_		-	12,204	- 0,005
Conventional		140	68,854	_	169	3,146	230		140	71,939	6,309
Finished Aviation Gasoline			17	2	106		-13		-	138	137
Kerosene-Type Jet Fuel			7,838	_	955		39		40	8,714	7,404
Kerosene			123	_			54		203	-134	160
Distillate Fuel Oil			31,577	71	4,786	895	-4,982		367	41,944	25,763
15 ppm sulfur and under Greater than 15 ppm to 500 ppm sulfur			31,701 80	43	4,637 105	895 	-4,839 35		0 48	42,114 102	24,963 419
Greater than 500 ppm sulfur			-204	28	44		-178		318	-272	381
Residual Fuel Oil <sup>6</sup>			1,485	60	-934		-102		368	345	1,146
Less than 0.31 percent sulfur			70	_	-110		-59		NA	NA NA	11
0.31 to 1.00 percent sulfur			245	60	_		-16		NA	NA	178
Greater than 1.00 percent sulfur			1,170	-	-824		-27		NA	NA	957
Petrochemical Feedstocks			883		-126		-38			963	581
Naphtha for Petro. Feed. Use			673	82	-135		-38			658	438
Other Oils for Petro. Feed. Use			210		9		0			305	143
Special Naphthas			43 114	51	18 251		-27		200	139 487	130 625
Lubricants			21	199	231		-123 -2		41	-12	48
Petroleum Coke			5,418	19	-1,472		-139		636	3,468	1,258
Marketable			4,018	19	-1,472		-139		636	2,068	1,258
Catalyst			1,400							1,400	
Asphalt and Road Oil			4,107	271	-430		-1,020		198	4,769	8,570
Still Gas			4,008							4,008	
Miscellaneous Products			454	1	10		40		2	423	153
Total	86,165	31,080	138,893	80,661	-33,894	-2,871	-5,850	132,010	12,554	161,321	332,728

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

3 Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol,

and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January

<sup>2005 (</sup>see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change. Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other

Table 10. PAD District 2 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels)

		Γ	Suppl	y		ı		Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	515,808			779,598	-49,660	-44,314	2,476	1,141,084	57,873	0	153,755
Hydrocarbon Gas Liquids	251,473	-6,010	40,652	24,260	-95,749		17,052	29,570	65,035	102,969	64,979
Natural Gas Liquids	251,473	-6,010	26,422	20,008	-88,362		16,124	29,570	65,035	92,802	· -
Ethane	82,046		_	_	_		1,068		17,022	25,984	-
Propane			22,677	16,158	-81,129		4,649		2,287	44,169	-
Normal Butane	30,433		17	1,768	-13,440		9,669	7,181	3,318	3,714	_
Isobutane			-1,370	2,040	-453		576	14,716	40.411	1,161	-
Natural Gasoline	29,357	-6,010 	14,230	42 4,252	44,632		162 928	7,673	42,411 	17,775 10,167	
Ethylene			14,230	4,252	_		920			10,107	
Propylene			12,912	3,486	_		119			8,892	
Butylene			1,318	766	-		809			1,275	_
Isobutylene			_	_	-		0			0	-
Other Liquids		306,418		3,327	-113,675	-18,163	-4,827	178,448	18,982	-14,696	61,710
Hydrogen/Oxygenates/Renewables/											
Other Hydrocarbons		306,429		480	-198,822	-7,918	866	91,969	7,333	0	8,666
Hydrogen				_	-	11,578		11,578	-	0	
Oxygenates (excluding Fuel Ethanol)		11		-	-	2	7		6	0	7
Renewable Fuels (including Fuel Ethanol)		306,418		370	-198,822	-19,754	845	80,040	7,327	0	8,628
Fuel Ethanol Renewable Fuels Except Fuel Ethanol		285,590 20,828		370	-192,756 -6,066	-10,549 -9,205	682 163	75,454 4,586	6,149 1,178	0	7,776 852
Other Hydrocarbons		20,020		110	-0,000	255	14		1,176	0	31
Unfinished Oils				-	-1,886		359	1,561	10,890	-14,696	13,496
Motor Gasoline Blend.Comp. (MGBC)		-11		2,847	87,033	-10.244	-6,052		759	0	39,548
Reformulated		-1		258	18,446	-11,214	-1,658	9,147	0	o	4,889
Conventional		-10		2,589	68,587	969	-4,394	75,771	758	0	34,659
Aviation Gasoline Blend. Comp				_	-		_	-	_	-	-
Finished Petroleum Products		1,041	1,379,254	7,552	23,238	30,039	-9,149		14,775	1,435,498	52,284
Finished Motor Gasoline		1,041	787,531	_	4,564	20,793	-938		1,620	813,247	6,309
Reformulated		_	110,359	_	_	13,288	-		_	123,647	_
Conventional		1,041	677,172	_	4,564	7,505	-938		1,620	689,600	6,309
Finished Aviation Gasoline			461	23	441		-74		1 00 1	999	137
Kerosene-Type Jet Fuel Kerosene			79,078 382	5	8,485		575 -36		1,894 218	85,099 200	7,404 160
Distillate Fuel Oil			330,638	325	30,688	9,246	-6,799		2,474	375,222	25,763
15 ppm sulfur and under			331,371	274	29,489	9,246	-6,325		11	376.695	24,963
Greater than 15 ppm to 500 ppm sulfur			321		887		-31		1,077	162	419
Greater than 500 ppm sulfur			-1,054	51	312		-443		1,387	-1,635	381
Residual Fuel Oil <sup>6</sup>			15,534	697	-8,306		-343		2,816	5,452	1,146
Less than 0.31 percent sulfur			959	_	-478		-21		NA	NA	11
0.31 to 1.00 percent sulfur			2,252	354	-95		-109		NA	NA	178
Greater than 1.00 percent sulfur			12,323	343	-7,733		-213		NA	NA 10 000	957
Petrochemical Feedstocks			9,709	1,480	-1,078		48			10,063	581
Naphtha for Petro. Feed. Use Other Oils for Petro. Feed. Use			7,164 2,545	759 721	-980 -98		47			6,896 3,167	438 143
Special Naphthas			523	721 444	198		-31			1,196	130
Lubricants			2,283	1,951	2,256		-115		1,867	4,738	625
Waxes			329	58			4		261	122	48
Petroleum Coke			58,502	225	-8,519		180		2,341	47,686	1,258
Marketable			43,783	225	-8,519		180		2,341	32,967	1,258
Catalyst			14,719							14,719	
Asphalt and Road Oil			46,582	2,340	-5,664		-1,650		1,277	43,630	8,570
Still Gas			42,811							42,811	
Miscellaneous Products			4,891	4	174		30		7	5,032	153
Total	767,281	301,449	1,419,906	814,737	-235,846	-32,438	5,552	1,349,102	156,664	1,523,772	332,728

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January

<sup>2005 (</sup>see explanatory notes).

5 Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change. Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Oxygenate Report." Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other

Table 11. PAD District 2 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	1,862			2,483	-531	-130	142	3,411	131	0
Hydrocarbon Gas Liquids	917	-20	82	77	-347		21	111	136	441
Natural Gas Liquids		-20	28	65	-326		14	111	136	403
Ethane			_	_	_		13		7	118
Propane			68	48	-221		17		4	199
Normal Butane			-686	10	-33		-18	41	8	24
Isobutane	50 103		-3	7 0	0		6 -4	41 29	0	7
Natural Gasoline Refinery Olefins		-20	54	11	114		-4 7	29	117	56 37
Ethylene			J4 _	'-	_		_			- 37
Propylene			44	7	-20		2			29
Butylene			9	4			5			9
Isobutylene			_	_	_		0			0
Other Liquids		1,018		15	-323	-118	-155	736	68	-56
Other Hydrocarbons		1,018		3	-567	-104	24	303	24	0
Hydrogen				_	-	38		38	_	0
Oxygenates (excluding Fuel Ethanol)		0		-	-	0	0	-	0	0
Renewable Fuels (including Fuel Ethanol)		1,018		2	-567	-142	23	264	24	0
Fuel Ethanol		945		_	-540	-113	21	249	21	0
Renewable Fuels Except Fuel Ethanol		74		2	-27	-29	2	15	2	0
Other Hydrocarbons				1	-	0	0	1	-	0
Unfinished Oils		0		12	-10 254	 -14	-27 -152	35 398	38 6	-56 0
Reformulated		0		12	43	-14	-132	59	0	0
Conventional		0		12	211	5	-116	339	6	0
Aviation Gasoline Blend. Comp				-	-		-	-	-	_
Finished Petroleum Products		5	4,399	27	108	156	-196		71	4.819
Finished Motor Gasoline		5	2,590		5	127	7		5	2,714
Reformulated		_	368	-	-	25	-		-	394
Conventional		5	2,221	-	5	101	7		5	2,321
Finished Aviation Gasoline			1	0	3		0		_	4
Kerosene-Type Jet Fuel			253	_	31		1		1	281
Kerosene			4	2	-		2		7	-4
Distillate Fuel Oil			1,019 1,023	1	154 150	29 29	-161 -156		12	1,353 1,359
Greater than 15 ppm to 500 ppm sulfur			3		3		-130		2	3
Greater than 500 ppm sulfur			-7	1	1		-6		10	-9
Residual Fuel Oil <sup>6</sup>			48	2	-30		-3		12	11
Less than 0.31 percent sulfur			2	_	-4		-2		NA	NA
0.31 to 1.00 percent sulfur			8	2	-		-1		NA	NA
Greater than 1.00 percent sulfur			38	_	-27		-1		NA	NA
Petrochemical Feedstocks			28	5	-4		-1			31
Naphtha for Petro. Feed. Use			22	3	-4		-1			21
Other Oils for Petro. Feed. Use			7	3 2	0		0 -1			10 4
Lubricants			4	6	8		-1 -4		6	16
Waxes			1	o o	_		0		1	0
Petroleum Coke			175	1	-47		-4		21	112
Marketable			130	1	-47		-4		21	67
Catalyst			45							45
Asphalt and Road Oil			132	9	-14		-33		6	154
Still Gas			129							129
Miscellaneous Products			15	0	0		1		0	14
Total	2,780	1,003	4,480	2,602	-1,093	-93	-189	4,258	405	5,204

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'I Inaccounted For Crude Oil.' Also included is an adjustment for motor caseling blanding components, final othersel.

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

4 A negative number indicates a decrease in stocks and a positive number indicates a decrease in stocks and a positive number indicates a decrease in stocks and a positive number indicates and acceptance in stocks.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>6</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Besidual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks.

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other intermetics.

Table 12. PAD District 2 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	1,697			2,564	-163	-146	8	3,754	190	0
Hydrocarbon Gas Liquids	827	-20	134	80	-315		56	97	214	339
Natural Gas Liquids		-20	87	66	-291		53	97	214	305
Ethane			-	_	_		4		56	85
Propane			75	53	-267		15		8	145
Normal Butane			17	6	-44		32	24	11	12
Isobutane			-5	7	-1		2	48	0	4
Natural Gasoline		-20		0	147		1	25	140	58
Refinery Olefins Ethylene			47	14	_		3			33
Propylene			42	11	-24		0			29
Butylene			4	3			3			4
Isobutylene			_	_	-		0			0
Other Liquids		1,008		11	-374	-60	-16	587	62	-48
Other Hydrocarbons		1,008		2	-654	-26	3	303	24	0
Hydrogen				_	-	38		38		0
Oxygenates (excluding Fuel Ethanol)		0		-	-	0	0	_	0	0
Renewable Fuels (including Fuel Ethanol)		1,008		1	-654	-65	3	263	24	0
Fuel Ethanol		939		_	-634	-35	2	248	20	0
Renewable Fuels Except Fuel Ethanol		69		1	-20	-30	1	15	4	0
Other Hydrocarbons				0	_	1	0	1	-	0
Unfinished Oils Motor Gasoline Blend.Comp. (MGBC)				9	-6 286	-34	-20	5 279	36 2	-48 0
Reformulated		0		1	61	-37	-20 -5	30	0	0
Conventional		ő		9	226	3	-14	249	2	0
Aviation Gasoline Blend. Comp				-	-		-	-	-	-
Finished Petroleum Products	.	3	4,537	25	76	99	-30		49	4,722
Finished Motor Gasoline		3	2,591	_	15	68	-3		5	2,675
Reformulated		_	363	_	_	44	_		_	407
Conventional		3	2,228	-	15	25	-3		5	2,268
Finished Aviation Gasoline			2	0	1		0		-	3
Kerosene-Type Jet Fuel			260	0	28		2		6	280
Kerosene  Distillate Fuel Oil			1,088	1	101	30	-22		8	1 1,234
15 ppm sulfur and under			1,090	1	97	30	-21		0	1,239
Greater than 15 ppm to 500 ppm sulfur			1	_	3		0		4	1
Greater than 500 ppm sulfur			-3	0	1		-1		5	-5
Residual Fuel Oil <sup>6</sup>			51	2	-27		-1		9	18
Less than 0.31 percent sulfur			3	-	-2		0		NA	NA
0.31 to 1.00 percent sulfur			7	1	0		0		NA	NA
Greater than 1.00 percent sulfur			41	1	-25		-1		NA	NA
Petrochemical Feedstocks			32 24	5 2	-4 -3		0			33 23
Other Oils for Petro. Feed. Use			8	2	-5		0			10
Special Naphthas			2	1	1		0			4
Lubricants			8	6	7		0		6	16
Waxes			1	0	_		0		1	0
Petroleum Coke			192	1	-28		1		8	157
Marketable			144	1	-28		1		8	108
Catalyst			48							48
Asphalt and Road Oil			153 141	8	-19 		-5 		4	144 141
Miscellaneous Products			16	0	1		0		0	17
Total	2,524	992	4,671	2,680	-776	-107	18	4,438	515	5,012

<sup>-- =</sup> Not Applicable.

\_ = No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>6</sup> Total residual fuel oil angling stocks and stock change, include stocks held at pipeling. Pecidual fuel oil angling stocks and stock change by sulfur content explude pipeling stocks.

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other intermetical.

Table 13. PAD District 3 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels)

		T	Suppl	у		1		Dispo	sition	1	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil <sup>6</sup>	184,490			77,267	21,932	9,581	-24,620	268,318	49,571	0	887,456
Hydrocarbon Gas Liquids	65,600	-21	10,971	183	20,980		111	9,550	35,414	52,638	146,212
Natural Gas Liquids	65,600	-21	4,341	-	20,581		744	9,550	35,414	44,793	141,790
Ethane	- ,		164	_	_		4,848		2,915	34,187	51,088
Propane			5,040	_	7,030		-1,672		29,323	4,144	35,177
Normal Butane			-686	_	1,360		-571	3,085	3,152	-1,552	37,111
Isobutane			-177	_	500		54	3,324	13	4,218	7,085
Natural Gasoline		-21		- 100	-2,017		-1,915	3,141	11	3,796	11,329
Refinery Olefins			6,630	183	_		-633			7,845	4,422
Ethylene			8	_	_		0			7 720	0
Propylene			6,983 -347	183	_		-357 -276			7,739 112	4,014 408
Butylene			-347	163	_		-2/6			-14	408
Isobutylene			-14	_	_		U			-14	U
Other Liquids		4,050		14,676	-56,355	6,584	2,733	-47,711	11,245	2,688	126,160
Other Hydrocarbons		4,050		219	3,636	5,082	84	9,286	3,616	0	6,984
Hydrogen				-	-,	4,147		4,147	-	0	
Oxygenates (excluding Fuel Ethanol)		2,450		211	_	-474	76	_	2,111	0	1,481
Renewable Fuels (including Fuel Ethanol)		1,600		_	3,636	1,417	8	5,139	1,506	0	5,503
Fuel Ethanol		884		_	3,321	1,744	-30	4,598	1,381	0	4,064
Renewable Fuels Except Fuel Ethanol		716		_	315	-327	38	541	125	0	1,439
Other Hydrocarbons				8	_	-8	_	_	_	0	_
Unfinished Oils				14,105	337		323	5,910	5,521	2,688	46,124
Motor Gasoline Blend.Comp. (MGBC)		_		352	-60,328	1,502	2,327	-62,908	2,107	0	73,042
Reformulated		_		_	-11,077	3,620	564	-8,027	6	0	11,112
Conventional Aviation Gasoline Blend. Comp				352	-49,251 -	-2,117 	1,763	-54,881 1	2,102	0	61,930 10
·			007 000	4,985	-48,184	-2,634	-1,994		93,363	100,131	105 500
Finished Petroleum Products		_	<b>237,333</b> 73,051	4,965	-6,633	-3,246	828		21,181	41,628	<b>105,592</b> 8,627
Reformulated		_	14,906	405	-0,000	-4,831	020		21,101	10.075	0,027
Conventional		_	58,145	465	-6,633	1,585	828		21,181	31,553	8,627
Finished Aviation Gasoline			204	-	-1,011		-10			-797	376
Kerosene-Type Jet Fuel			25,411	_	-14,880		1,657		4,362	4,512	15,461
Kerosene			22	_	´ –		-13		3	32	112
Distillate Fuel Oil			88,178	207	-26,634	612	-2,776		40,228	24,911	41,031
15 ppm sulfur and under			80,382	_	-24,549	612	-1,454		35,848	22,051	35,521
Greater than 15 ppm to 500 ppm sulfur			2,579	-	-436		169		2,304	-330	1,654
Greater than 500 ppm sulfur			5,217	207	-1,649		-1,491		2,075	3,191	3,856
Residual Fuel Oil <sup>7</sup>			6,951	1,378	934		-1,339		9,165	1,437	19,762
Less than 0.31 percent sulfur			1,198	_	110		-348		NA	NA	1,404
0.31 to 1.00 percent sulfur			441		-		-328		NA	NA	4,389
Greater than 1.00 percent sulfur			5,312	1,378	824		-663		NA	NA 0.014	13,969
Petrochemical Feedstocks			7,664	,	135		50			9,014	2,322
Naphtha for Petro. Feed. Use Other Oils for Petro. Feed. Use			4,621 3,043	1,219 46	135		87 -37			5,888 3,126	1,481 841
Special Naphthas			1,195	458	-18		38			1,597	758
Lubricants			4,447	706	-620		100		2,210	2,223	7,141
Waxes			112	37	-		-12		19	142	203
Petroleum Coke			15,088	469	888		-224		15,808	861	5,092
Marketable			11,472	469	888		-224		15,808	-2,755	5,092
Catalyst			3,616							3,616	
Asphalt and Road Oil			2,443	-	-335		-369		381	2,096	4,294
Still Gas			10,854							10,854	´
Miscellaneous Products			1,713	-	-10		76		7	1,620	413
Total	250,090	4,029	248,304	97,111	-61,626	13,530	-23,770	230,157	189,593	155 457	1,265,420

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

3 Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol,

and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus

adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

<sup>7</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy

Table 14. PAD District 3 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels)

			Suppl	у				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil <sup>6</sup>	1,752,225			882,148	104,022	85,407	-53,409	2,629,405	247,806	0	887,456
Hydrocarbon Gas Liquids	604,157	-184	132,089	3,994	199,581		9,501	91,205	298,964	539,967	146,212
Natural Gas Liquids	604,157	-184	69,359	2,733	195,021		13,414	91,205	298,964	467,503	_
Ethane	249,048		1,545	_			6,958		22,732	331,375	_
Propane  Normal Butane	185,817		48,290	14	87,454		-11,671		244,245	89,001	_
Isobutane	29,805 72,080		20,279 -755	30	22,082 5,353		20,266 1,750	22,404 35,040	30,393 1,290	-897 38,628	_
Natural Gasoline	67,407	-184	-755	2,689	-30,340		-3,889	33,761	304	9,396	_
Refinery Olefins			62,730		-		-3,913			72,464	_
Ethylene			71	-,	_		0,0.0			71	_
Propylene			65,625	_	_		-2,158			72,343	_
Butylene			-2,728	1,261	-		-1,755			288	_
Isobutylene			-238	_	_		0			-238	_
Other Liquids		35,548		151,431	-550,181	8,117	6,308	-497,431	108,015	28,023	126,160
Other Hydrocarbons		35,548		5,017	53,380	34,497	-89	89,946	38,585	0	6,984
Hydrogen				5,017	-	40,328		40,328	-	ő	0,504
Oxygenates (excluding Fuel Ethanol)		21,436		3,203	_	-3,866	4	318	20.451	0	1,481
Renewable Fuels (including Fuel Ethanol)		14,112		1,716	53,380	-1,867	-93	49,300	18,134	0	5,503
Fuel Ethanol		8,225		_	52,406	2,245	739	44,660	17,477	0	4,064
Renewable Fuels Except Fuel Ethanol		5,887		1,716	974	-4,112	-832	4,640	657	0	1,439
Other Hydrocarbons				98	_	-98	_	_	_	0	_
Unfinished Oils				132,801	2,246		4,552	50,906	51,494	28,095	46,124
Motor Gasoline Blend.Comp. (MGBC)		_		13,613	-605,807	-26,380	1,844	-638,354	17,936	0	73,042
Reformulated		_		10.610	-124,635 -481,172	35,017	-543	-89,142	67 17.000	0	11,112 61,930
Conventional				13,613	-461,1 <i>1</i> 2	-61,397 	2,387 1	-549,212 71	17,869 –	-72	10
Finished Petroleum Products		_	2,272,175	50,322	-488,839	30,148	-18,200		828,407	1,053,599	105,592
Finished Motor Gasoline		_	661,463	1,187	-72,298	24,135	-2,847		187,225	430,109	8,627
Reformulated		-	140,580	, –	, –	-38,277	_		_	102,303	_
Conventional		-	520,883	1,187	-72,298	62,412	-2,847		187,225	327,805	8,627
Finished Aviation Gasoline			2,432	_	-11,946		-41		_	-9,473	376
Kerosene-Type Jet Fuel			259,818	_	-151,387		395		44,818	63,218	15,461
Kerosene			211	- 0.000	-		-134		607	-262	112
Distillate Fuel Oil			847,878	2,903	-257,795	6,013	-7,761		361,902	244,857	41,031
15 ppm sulfur and under Greater than 15 ppm to 500 ppm sulfur			769,267 29,462	_	-238,875 -3,927	6,013	-6,862 157		314,778 28,761	228,489 -3,383	35,521 1,654
Greater than 500 ppm sulfur			49.149	2,903	-14.993		-1.056		18,364	19,751	3,856
Residual Fuel Oil <sup>7</sup>			65,113	20,117	7,957		-4,594		70,004	27,775	19,762
Less than 0.31 percent sulfur			10,356	2,334	581		-867		NA	NA NA	1,404
0.31 to 1.00 percent sulfur			3,474	1,423	112		-900		NA	NA	4,389
Greater than 1.00 percent sulfur			51,283	16,360	7,264		-2,827		NA	NA	13,969
Petrochemical Feedstocks			83,064	, -	1,301		-225			96,710	2,322
Naphtha for Petro. Feed. Use			51,138	8,775	980		21			60,872	1,481
Other Oils for Petro. Feed. Use			31,926		321		-246			35,838	841
Special Naphthas			10,080	3,840	-198		-248		07.000	13,970	758
Lubricants			40,504 1,121	7,671 298	-6,772 -9		-2,688 -47		27,668 230	16,423 1,227	7,141 203
Petroleum Coke			150,267	2,166	5,830		-47 544		132,860	24,859	5,092
Marketable			115,421	2,166	5,830		544		132,860	-9,987	5,092
Catalyst			34,846	2,100						34,846	
Asphalt and Road Oil			24,396	-	-3,348		-543		2,871	18,720	4,294
Still Gas			108,524							108,524	
Miscellaneous Products			17,304	20	-174		-11		218	16,943	413
Total	2,356,382	35,364	2,404,264	1,087,895	-735,418	123,672	-55,800	2,223,179	1,483,191	1,621,589	1,265,420

<sup>=</sup> Not Applicable.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

<sup>=</sup> No Data Reported.

<sup>=</sup> Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

3 Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol,

and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus

adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>&</sup>lt;sup>7</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy

Table 15. PAD District 3 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil <sup>6</sup>	5,951			2,492	707	309	-794	8,655	1,599	0
Hydrocarbon Gas Liquids	2,116	-1	354	6	677		4	308	1,142	1,698
Natural Gas Liquids	2,116	-1	140	-	664		24	308	1,142	1,445
Ethane	906		5	-	-		156		94	1,103
Propane  Normal Butane			163 -22	_	227 44		-54 -18	 100	946 102	134 -50
Isobutane			-6	_	16		2	107	0	136
Natural Gasoline		-1		_	-65		-62	101	0	122
Refinery Olefins			214	6	_		-20			253
Ethylene			0	_	_		0			0
Propylene			225		13		-12			250
ButyleneIsobutylene			-11	6	_		-9 0			4
·					-					
Other Liquids		131		473	-1,818	212	88	-1,539	363	87
Other Hydrocarbons		131		7	117	164	3	300	117	0
Hydrogen Oxygenates (excluding Fuel Ethanol)		79		7	-	134 -15	 2	134	- 68	0
Renewable Fuels (including Fuel Ethanol)		52			117	46	0	166	49	0
Fuel Ethanol		29		_	107	56	-1	148	45	0
Renewable Fuels Except Fuel Ethanol		23		_	10	-11	1	17	4	0
Other Hydrocarbons				0	_	0	_	_	_	0
Unfinished Oils				455	11		10	191	178	87
Motor Gasoline Blend.Comp. (MGBC)		_		11	-1,946 -357	48 117	75 18	-2,029 -259	68 0	0
Conventional		_		11	-1,589	-68	57	-1,770	68	0
Aviation Gasoline Blend. Comp				-	-		0	0	-	0
Finished Petroleum Products		_	7,656	161	-1,554	-85	-64		3,012	3,230
Finished Motor Gasoline		_	2,356 481	15	-214	-105 -156	27		683	1,343 325
Reformulated  Conventional		_	1,876	15	-214	51	27		683	1,018
Finished Aviation Gasoline			7,070	-	-33		0		-	-26
Kerosene-Type Jet Fuel			820	_	-480		53		141	146
Kerosene			1	-	_		0		0	1
Distillate Fuel Oil			2,844	7	-859	20	-90		1,298	804
15 ppm sulfur and under			2,593 83	_	-792 -14	20	-47 5		1,156 74	711 -11
Greater than 15 ppm to 500 ppm sulfur  Greater than 500 ppm sulfur			168	7	-14 -53		-48		67	103
Residual Fuel Oil <sup>7</sup>			224	44	30		-43		296	46
Less than 0.31 percent sulfur			39	-	4		-11		NA	NA
0.31 to 1.00 percent sulfur			14	_	-		-11		NA	NA
Greater than 1.00 percent sulfur			171	44	27		-21		NA	NA
Petrochemical Feedstocks			247 149	41 39	4		2			291 190
Other Oils for Petro. Feed. Use			98		4		ა -1			190
Special Naphthas			39		-1		1			52
Lubricants			143		-20		3		71	72
Waxes			4	1	_		0		1	5
Petroleum Coke			487 370	15 15	29 29		-7 -7		510	28 -89
Marketable Catalyst			117		29		-/		510 	-89 117
Asphalt and Road Oil			79	_	-11		-12		12	68
Still Gas			350							350
Miscellaneous Products			55	_	0		2		0	52
Total	8,067	130	8,010	3,133	-1,988	436	-767	7,424	6,116	5,015

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

7 Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy

Table 16. PAD District 3 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil <sup>6</sup>	5,764			2,902	342	281	-176	8,649	815	0
Hydrocarbon Gas Liquids	1,987	-1	435	13	657		31	300	983	1,776
Natural Gas Liquids		-1	228	9	642		44	300	983	1,538
Ethane	819		5	_	-		23		75	1,090
Propane	611		159	0	288		-38		803	293
Normal Butane	98		1,184	_	73		67	74	100	-3
Isobutane	237		-2	0	18		6	115	4	127
Natural Gasoline		-1		9	-100		-13	111	1	31
Refinery Olefins			206	4	-		-13			238
Ethylene			0	_	-		0			0
Propylene			216		15		-7			238
Butylene			-9	4	_		-6			1
Isobutylene			-1	-	-		0			-1
Other Liquids		117		498	-1,810	27	21	-1,636	355	92
Other Hydrocarbons		117		17	176	113	0	296	127	0
Hydrogen				_	-	133		133	_	0
Oxygenates (excluding Fuel Ethanol)		71		11	-	-13	0	1	67	0
Renewable Fuels (including Fuel Ethanol)		46		6	176	-6	0	162	60	0
Fuel Ethanol		27		_	172	7	2	147	57	0
Renewable Fuels Except Fuel Ethanol		19		6	3	-14 0	-3	15	2	0
Other Hydrocarbons				437	7		15	167	169	92
Motor Gasoline Blend.Comp. (MGBC)				457	-1,993	-87	6	-2,100	59	92
Reformulated		_		45	-410	115	-2	-2,100	0	0
Conventional		_		45	-1,583	-202	8	-1,807	59	0
Aviation Gasoline Blend. Comp.				-	- 1,000		0	0	-	0
Finished Petroleum Products			7,474	166	-1,608	99	-60		2,725	3,466
Finished Motor Gasoline		_	2,176	4	-238	79	-9		616	1,415
Reformulated		_	462	_		-126	_		-	337
Conventional		_	1,713	4	-238	205	-9		616	1,078
Finished Aviation Gasoline			8	_	-39		0		-	-31
Kerosene-Type Jet Fuel			855	_	-498		1		147	208
Kerosene			1	_	-		0		2	-1
Distillate Fuel Oil			2,789	10	-848	20	-26		1,190	805
15 ppm sulfur and under			2,530	_	-786	20	-23		1,035	752
Greater than 15 ppm to 500 ppm sulfur			97	_	-13		1		95	-11
Greater than 500 ppm sulfur			162	10	-49		-3		60	65
Residual Fuel Oil <sup>7</sup>			214	66	26		-15		230	91
Less than 0.31 percent sulfur			34	8	2		-3		NA	NA
0.31 to 1.00 percent sulfur			11	5	0		-3		NA	NA
Greater than 1.00 percent sulfur			169	54	24		-9		NA	NA 210
Petrochemical Feedstocks			273 168	40 29	3		-1 0			318 200
Other Oils for Petro. Feed. Use			105		1		-1			118
Special Naphthas			33	13	-1		-1			46
Lubricants			133	25	-22		-9		91	54
Waxes			4	1	0		0		1	4
Petroleum Coke			494		19		2		437	82
Marketable			380		19		2		437	-33
Catalyst			115							115
Asphalt and Road Oil			80	_	-11		-2		9	62
Still Gas			357							357
Miscellaneous Products			57	0	-1		0		1	56
	7,751	116	7,909	3,579	-2,419	407	-184	7,313	4,879	5,334

<sup>-- =</sup> Not Applicable.

<sup>- =</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

<sup>7</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.
Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy

Table 17. PAD District 4 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels)

		Ī	Suppl	y		I		Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	23,969			10,601	-13,727	-1,855	-383	19,332	39	0	20,685
Hydrocarbon Gas Liquids	12,840	-10	327	365	-11,358		-12	680	100	1.396	4,439
Natural Gas Liquids	12,840	-10	305	365	-11,358		0	680	100	1,362	4,430
Ethane	4,033		_	_	_		10		-	401	420
Propane	4,426		282	355	-3,923		28		_	1,112	1,537
Normal Butane	1,721		4	8	-1,473		-32	259	8	25	1,888
Isobutane	783		19	2	-825		-2	230	92	-249	259
Natural Gasoline	1,877	-10 	22	_	-1,515		-4 -12	191	92	73 34	326 9
Ethylene				_	_		-12			- 54	-
Propylene			3	_			-6			9	1
Butylene			19	_	-		-6			25	8
Isobutylene			-	-	_		0			0	0
Other Liquids		432		19	112	-1,603	-164	-1,197	0	320	8,622
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons		432		7	392	295	-43	1,169	0	0	357
Hydrogen				_	-	226		226	_	Ö	
Oxygenates (excluding Fuel Ethanol)		_		_	_	0	_		0	Ö	_
Renewable Fuels (including Fuel Ethanol)		432		7	392	69	-43	943	_	0	357
Fuel Ethanol		432		-	392	40	-41	905	_	0	352
Renewable Fuels Except Fuel Ethanol		_		7	_	29	-2	38	_	0	5
Other Hydrocarbons				-	-	-	-	-	_	_	_
Unfinished Oils				_	_		-34	-286	0	320	2,955
Motor Gasoline Blend.Comp. (MGBC)		-		12	-280	-1,899	-87	-2,080	0	0	5,310
Reformulated		_		_	-280	-1,899	- -87	-2,080	0	0	5,310
Conventional				_	-260	-1,099	-07	-2,000	-	-	5,510
Finished Petroleum Products		_	19,474	127	-624	1,830	31		37	20,738	7,195
Finished Motor Gasoline		_	9,040	-	-558	1,859	254		1	10,086	1,751
Reformulated		_		_	-	-,000	_		_	-	-,,,,,,
Conventional		-	9,040	-	-558	1,859	254		1	10,086	1,751
Finished Aviation Gasoline			6	1	_		-1		_	8	8
Kerosene-Type Jet Fuel			1,105	50	694		-8		_	1,857	773
Kerosene			- 0.055	-	-		0		-	0	1
Distillate Fuel Oil			6,255	46	186	-29	-238		-	6,696	3,188
15 ppm sulfur and under Greater than 15 ppm to 500 ppm sulfur			6,155 50	46	186	-29	-272 -16		_	6,630 66	2,940 164
Greater than 500 ppm sulfur			50	_	_		-10 50		_	0	84
Residual Fuel Oil <sup>6</sup>			336	_	_		-39		18	357	202
Less than 0.31 percent sulfur			181	-	-		-24		NA	NA	8
0.31 to 1.00 percent sulfur			21	-	-		4		NA	NA	9
Greater than 1.00 percent sulfur			134	-	-		-19		NA	NA	185
Petrochemical Feedstocks			_	-	-		-			-	-
Naphtha for Petro. Feed. Use			_	_	_		_			_	_
Other Oils for Petro. Feed. Use			_	-	-		_			-	-
Special Naphthas Lubricants			_	_	_		_		12	-12	_
Waxes			_	_	_		_		12	-12	_
Petroleum Coke			788	_	-310		11		_	467	96
Marketable			559	-	-310		11		_	238	96
Catalyst			229							229	
Asphalt and Road Oil			1,117	29	-636		51		6	453	1,161
Still Gas			697							697	
Miscellaneous Products			130	1	_		1		0	130	15
Total	36,809	422	19,801	11,112	-25,597	-1,629	-528	18,815	176	22,455	40,941

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus repewable fuels and expressed plant pet production, plus refinence and blender net production, plus imports, plus net receipts, plus

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

6 Total residual fuel oil engine stocks and stock above include stocks had a stock and st

<sup>&</sup>lt;sup>6</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other

Table 18. PAD District 4 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels)

		I	Suppl	y				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	208,621			104,921	-127,723	3,459	-2,635	191,116	797	0	20,685
Hydrocarbon Gas Liquids	117,509	-94	4,810	3,189	-105,817		1,094	5.731	2,528	10,244	4,439
Natural Gas Liquids		-94	4,292	3,189	-105,817		1,124	5,731	2,528	9,696	_
Ethane	33,606		_	_			-16		-	1,960	-
Propane	,		2,936	2,898	-37,620		184		1	10,063	_
Normal Butane	16,331		1,184	93	-14,290		933	1,843	203	339	_
Isobutane Natural Gasoline		 -94	172	198	-8,057 -14,188		1 22	2,204 1,684	2,324	-2,313 -353	_
Refinery Olefins		-94	518	_	-14,100		-30	1,004	2,324	548	
Ethylene			310	_	_		-50			340	_
Propylene			151	_	_		1			150	_
Butylene			367	-	_		-31			398	_
Isobutylene			_	-	_		0			0	_
Other Liquids		4,250		389	1,024	-5,636	-246	-874	98	1,049	8,622
Hydrogen/Oxygenates/Renewables/		4.050		44	0.500	2.010	10	11 500	00	0	257
Other Hydrocarbons		4,250		44	3,508	3,810 2,086	-10 	11,599 2,086	23	0	357
Oxygenates (excluding Fuel Ethanol)				_	_	2,000		2,000	0	0	
Renewable Fuels (including Fuel Ethanol)		4,250		44	3,508	1,724	-10	9,513	23	0	357
Fuel Ethanol		4,250		-	3,123	1.628	-1	9,002	0	0	352
Renewable Fuels Except Fuel Ethanol		-,		44	385	96	-9	511	23	0	5
Other Hydrocarbons				-	-	_	_	_	_	-	_
Unfinished Oils				_	_		126	-1,249	74	1,049	2,955
Motor Gasoline Blend.Comp. (MGBC)		_		345	-2,484	-9,446	-362	-11,224	1	0	5,310
Reformulated		_		_	-	-	-	-	-	_	-
Conventional		_		_	-2,484	-9,446	-362	-11,224	1	0	5,310
Aviation Gasoline Blend. Comp				_	_		_	_	_	_	_
Finished Petroleum Products		_	200,466	1,031	-6,671	7,722	-1,798		378	203,968	7,195
Finished Motor Gasoline		_	95,282	-	-5,146	7,818	-487		8	98,433	1,751
Reformulated		_		-		· –	-		-		
Conventional		_	95,282	-	-5,146	7,818	-487		8	98,433	1,751
Finished Aviation Gasoline			44	9	_		-1		-	54	8
Kerosene-Type Jet Fuel			11,049	156	6,644		173		_	17,676	773
Kerosene			62,574	438	-1,032	 -96	-1,128		-	63,012	1 3,188
15 ppm sulfur and under			62,374	438	-1,032	-96 -96	-1,120		_	62,787	2,940
Greater than 15 ppm to 500 ppm sulfur			376	-	-700	-30	-1,102		_	432	164
Greater than 500 ppm sulfur			87	_	-264		30		_	-207	84
Residual Fuel Oil <sup>6</sup>			3,620	_			-22		190	3,452	202
Less than 0.31 percent sulfur			2,044	_	-		-26		NA	NA	8
0.31 to 1.00 percent sulfur			209	-	-		5		NA	NA	9
Greater than 1.00 percent sulfur			1,367	_	_		-1		NA	NA	185
Petrochemical Feedstocks			_	_	_		-			_	_
Naphtha for Petro. Feed. Use			_	_	_		_			_	_
Other Oils for Petro. Feed. Use			_	_	-		_			_	_
Lubricants			_	_	_		_		115	-115	_
Waxes			_	_	_		_		113	-113	_
Petroleum Coke			7,907	_	-3,054		-48		1	4,900	96
Marketable			5,418	-	-3,054		-48		1	2,411	96
Catalyst			2,489							2,489	
Asphalt and Road Oil			11,516	417	-4,082		-283		62	8,071	1,161
Still Gas			7,317							7,317	
Miscellaneous Products			1,155	11	_		-2		0	1,168	15
Total	326,130	4,156	205,276	109,530	-239,186	5,545	-3,585	195,973	3,801	215,261	40,941

<sup>-- =</sup> Not Applicable.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>6</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks.

O Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.
Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Table 19. PAD District 4 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	773			342	-443	-60	-12	624	1	0
Hydrocarbon Gas Liquids	414	0	11	12	-366		0	22	3	45
Natural Gas Liquids	414	0	10	12	-366		0	22	3	44
Ethane	130		_	-	-		0		-	13
Propane	143		9	11	-127		1		_	36
Normal Butane	56		0	0	-48		-1	8	0	1
Isobutane	25	 0	1	0	-27		0	7	-	-8
Natural Gasoline	61			_	-49		0	6	3	2
Refinery Olefins Ethylene			_	_	_		0			_
Propylene			0	_	_		0			0
Butylene			1	_	_		0			1
Isobutylene			_	_	-		0			0
Other Liquids		14		1	4	-52	-5	-39	0	10
Other Hydrocarbons		14		0	13	10	-1	38	0	0
Hydrogen				_	-	7		7	_	0
Oxygenates (excluding Fuel Ethanol)		_		-	_	0	_	_	0	0
Renewable Fuels (including Fuel Ethanol)		14		0	13	2	-1	30	_	0
Fuel Ethanol		14		-	13	1	-1	29	-	0
Renewable Fuels Except Fuel Ethanol		_		0	_	1	0	1	_	0
Other Hydrocarbons				-	_	_	_	_	_	_
Unfinished Oils				_	_		-1	-9	0	10
Motor Gasoline Blend.Comp. (MGBC)		_		0	-9	-61	-3	-67	0	0
Reformulated Conventional		_		_	-9	- -61	-3	- -67	0	0
Aviation Gasoline Blend. Comp.				-	_		-	-	-	_
Finished Petroleum Products		_	<b>628</b> 292	4 -	<b>-20</b> -18	<b>59</b> 60	<b>1</b> 8		<b>1</b> 0	<b>669</b> 325
Reformulated		_	_	-	_	_	_		_	_
Conventional		_	292	_	-18	60	8		0	325
Finished Aviation Gasoline			0	0	22		0		-	0
Kerosene-Type Jet Fuel Kerosene			36	_	22		0		_	60
Distillate Fuel Oil			202	1	6	-1	-8		_	216
15 ppm sulfur and under			199	1	6	-1	-9		_	214
Greater than 15 ppm to 500 ppm sulfur			2	-	_		-1		_	2
Greater than 500 ppm sulfur			2	-	-		2		_	0
Residual Fuel Oil <sup>6</sup>			11	_	-		-1		1	12
Less than 0.31 percent sulfur			6	_	_		-1		NA	NA
0.31 to 1.00 percent sulfur			1	_	_		0		NA	NA
Greater than 1.00 percent sulfur			4	_	_		-1		NA	NA
Petrochemical Feedstocks			_	_	_		_			_
Other Oils for Petro. Feed. Use			_	_	_		_			
Special Naphthas			_	_	_		_			-
Lubricants			_	_	_		_		0	0
Waxes			-	-	-		_		-	_
Petroleum Coke			25	-	-10		0		_	15
Marketable			18	_	-10		0		_	8
Catalyst			7							7
Asphalt and Road Oil			36	1	-21		2		0	15
Still Gas			22 4				 0		 0	22 4
Total	1,187	14	639	358	-826	-53	-17	607	6	724

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).
 Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus

Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.
6 Total residual fuel oil and its stocks and stock change, include stocks and stock change by suffix content explicitly production.

<sup>&</sup>lt;sup>6</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 20. PAD District 4 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	686			345	-420	11	-9	629	3	0
Hydrocarbon Gas Liquids	387	0	16	10	-348		4	19	8	34
Natural Gas Liquids		0	14	10	-348		4	19	8	32
Ethane			-	-	-		0		-	6
Propane			10	10	-124		1		0	33
Normal Butane			4	0	-47		3	6 7	1	1 -8
Isobutane Natural Gasoline		0	'		-27 -47		0	6	8	-o -1
Refinery Olefins			2	_	-		0			2
Ethylene			_	-	-		_			_
Propylene			0	-	_		0			0
Butylene			1	_	_		0			1
Isobutylene			-	-	-		0			0
Other Liquids		14		1	3	-19	-1	-3	0	3
Other Hydrocarbons		14		0	12	13	0	38	0	0
Hydrogen				_	-	7		7	_	0
Oxygenates (excluding Fuel Ethanol)		-		_	-	0	_	-	0	0
Renewable Fuels (including Fuel Ethanol)		14 14		0	12	6	0	31 30	0	0
Fuel Ethanol Renewable Fuels Except Fuel Ethanol		14		0	10	5 0	0	2	0	0
Other Hydrocarbons				_		-	-	_	_	_
Unfinished Oils				_	_		0	-4	0	3
Motor Gasoline Blend.Comp. (MGBC)		_		1	-8	-31	-1	-37	0	0
Reformulated		_		_	_	_	-	-	_	_
Conventional				_	-8 -	-31 	-1 -	-37 -	0	0
				_						
Finished Petroleum Products		_	659	3	-22	25	-6		1	671
Finished Motor Gasoline		_	313	_	-17	26	-2		0	324
Conventional		_	313	_	-17	26	-2		0	324
Finished Aviation Gasoline			0.0	0	.,		0		_	024
Kerosene-Type Jet Fuel			36	1	22		1		_	58
Kerosene			0	_	_		0		_	0
Distillate Fuel Oil			206	1	-3	0	-4		-	207
15 ppm sulfur and under			204	1	-3	0	-4		-	207
Greater than 15 ppm to 500 ppm sulfur  Greater than 500 ppm sulfur			1 0	_	-1		0		_	1 -1
Residual Fuel Oil <sup>6</sup>			12	_	-1		0		_ 1	11
Less than 0.31 percent sulfur			7	_	_		0		NA	NA NA
0.31 to 1.00 percent sulfur			1	_	_		0		NA	NA
Greater than 1.00 percent sulfur			4	_	_		0		NA	NA
Petrochemical Feedstocks			_	-	_		-			_
Naphtha for Petro. Feed. Use			_	_	_		_			_
Other Oils for Petro. Feed. Use			_	_	_		-			-
Lubricants			_	_	_		_			0
Waxes			_	_	_		_		0	0
Petroleum Coke			26	_	-10		0		0	16
Marketable			18	_	-10		0		0	8
Catalyst			8							8
Asphalt and Road Oil			38	1	-13		-1		0	27
Still Gas			24							24
Miscellaneous Products			4	0	-		0		0	4
Total	1,073	14	675	360	-787	18	-12	645	13	708

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January

<sup>2005 (</sup>see explanatory notes).

5 Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

6 Total residual fuel cities stocks and stock change include stocks hald at pipeling

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change. Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board, and other

Table 21. PAD District 5 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels)

		ı	Suppl	у				Dispo	sition		ı
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	30,790			38,886	4,764	219	4,153	70,506	-	0	52,377
Hydrocarbon Gas Liquids	2,071	-13	1,772	1,283	967		236	3,100	750	1,994	6,222
Natural Gas Liquids	2,071	-13	1,568	1,283	967		185	3,100	750	1,841	6,096
Ethane	321		1,200	891	344		-15		0 672	2,099	2,155
Propane  Normal Butane	479		1,200	374	419		140	1,020	75	150	3,295
Isobutane			255	18	204		66	1,199		-513	597
Natural Gasoline	995	-13	255	10	204		-6	881	_ 2	105	49
Refinery Olefins		-13	204	_	_		51			153	126
Ethylene			204	_	_		J1			133	120
Propylene			246	_	_		1			245	21
Butylene			-42	_	_		50			-92	105
Isobutylene			-	_	_		0			0	0
Other Liquids		900		6,521	9,312	-1,858	-1,729	16,720	257	-374	50,450
Hydrogen/Oxygenates/Renewables/		300		0,321	3,512	-1,030	-1,723	10,720	237	-3/4	30,430
Other Hydrocarbons		900		581	5,050	365	-55	6,900	51	0	3,945
Hydrogen				-	-	1,334		1,334	-	Ö	
Oxygenates (excluding Fuel Ethanol)		_		_	_	2	_	-	2	0	_
Renewable Fuels (including Fuel Ethanol)		900		581	5,050	-971	-55	5,566	49	0	3,945
Fuel Ethanol		615		_	4,681	-410	-133	4,984	35	0	2,678
Renewable Fuels Except Fuel Ethanol		285		581	368	-560	78	582	14	0	1,267
Other Hydrocarbons				-	-	_	_	_	_	-	_
Unfinished Oils				5,437	_		-525	6,196	140	-374	20,638
Motor Gasoline Blend.Comp. (MGBC)		_		503	4,262	-2,224	-1,149	3,624	66	0	25,867
Reformulated		_		_	1,932	123	-492	2,546	1	0	12,387
Conventional		-		503	2,330	-2,347	-657	1,078	65	0	13,480
Aviation Gasoline Blend. Comp				_			_	_	_	_	_
Finished Petroleum Products		_	94,513	4,859	1,716	2,972	-3,234		10,924	96,370	31,326
Finished Motor Gasoline		-	50,102	36	400	2,634	34		1,285	51,852	2,262
Reformulated		_	35,285	_	400	-44	-3		- 4 005	35,244	16
Conventional		_	14,817	36	400	2,678	37		1,285	16,608	2,246
Finished Aviation Gasoline			63	2.476	222		33		460	34	273
Kerosene-Type Jet Fuel			12,629	3,476	222		-912		463 2	16,776	9,443
Kerosene			12 17,537	353	677	338	31 -940		3,497	-21 16,348	35 11,555
15 ppm sulfur and under			16,770	353	677	338	-940		1,833	17,109	10,561
Greater than 15 ppm to 500 ppm sulfur			318	- 352	-		-603 57		227	34	279
Greater than 500 ppm sulfur			449	1	_		-192		1,437	-795	715
Residual Fuel Oil <sup>6</sup>			4,099	800	_		-1,062		826	5,135	4,163
Less than 0.31 percent sulfur			,550	-	_		-366		NA	NA NA	98
0.31 to 1.00 percent sulfur			518	106	_		-265		NA	NA	483
Greater than 1.00 percent sulfur			3,581	694	-		-431		NA	NA	3,576
Petrochemical Feedstocks			4		_		-1			43	2
Naphtha for Petro. Feed. Use			4	38	_		-1			43	2
Other Oils for Petro. Feed. Use			_	-	_		-			_	-
Special Naphthas			26	-	_		12			14	59
Lubricants			706	27	-132		-91		350	342	801
Waxes			_	39	_		-		5	34	_
Petroleum Coke			4,288	31	85		-153		4,473	84	1,350
Marketable			3,171	31	85		-153		4,473	-1,033	1,350
Catalyst			1,117		464					1,117	1 001
Asphalt and Road Oil			875	54	464		-184		23	1,554	1,281
Still Gas			3,735 437	1			 -1		 0	3,735 439	 102
	1	1	i .	I	ı	ı		1			

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>5</sup> Product supplied is equal to field production, plus represents plus net receipts, plus refinery and blender net production, plus imports, plus net receipts, plus

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>&</sup>lt;sup>6</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other

Table 22. PAD District 5 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels)

			Suppl	у				Dispo	sition		
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>	Ending Stocks
Crude Oil	299,142			372,052	43,425	23,065	672	732,479	4,533	0	52,377
Hydrocarbon Gas Liquids	19,816	-133	20,192	10,160	7,961		1,824	25,228	12,781	18,163	6,222
Natural Gas Liquids	19,816	-133	17,430	10,160	7,961		1,720	25,228	12,781	15,505	_
Ethane	16		_	_	_		_		1	15	-
Propane	3,202		11,419	8,380	3,017		592		9,270	16,156	_
Normal Butane	3,115		4,676	1,670	3,375		989	8,617	3,404	-174	-
Isobutane	4,017		1,335	110	1,569		125	8,340	0	-1,434	_
Natural Gasoline	9,466	-133 	2,762	_	_		14 104	8,271	106	942 2,658	_
Refinery Olefins			2,762	_	_		104			2,008	_
Ethylene			2,700		_		9			2,691	
Butylene			62	_	_		95			-33	
Isobutylene			- -	_	_		0			0	_
Other Liquids		8,508		51,897	96,619	-11.988	712	136,770	5,602	1,952	50,450
Hydrogen/Oxygenates/Renewables/		0,300		31,097	90,019	-11,900	/ 12	130,770	3,002	1,932	30,430
Other Hydrocarbons		8,508		6,129	48,044	6,219	-105	67,110	1,896	0	3,945
Hydrogen				- 0,120	- 10,011	11,850		11,850	- 1,000	ő	
Oxygenates (excluding Fuel Ethanol)		_		_	_	18	_	-	18	0	_
Renewable Fuels (including Fuel Ethanol)		8,508		6,129	48,044	-5,649	-105	55,260	1,878	0	3,945
Fuel Ethanol		5,942		1,228	44,606	-1,272	205	48,630	1,670	0	2,678
Renewable Fuels Except Fuel Ethanol		2,566		4,901	3,438	-4,377	-310	6,630	208	0	1,267
Other Hydrocarbons				-	_	_	-	_	_	-	-
Unfinished Oils				35,937	_		2,066	30,544	1,375	1,952	20,638
Motor Gasoline Blend.Comp. (MGBC)		_		9,831	48,575	-18,207	-1,249	39,116	2,332	0	25,867
Reformulated		_		268	23,951	-236	-1,937	25,912	8	0	12,387
Conventional				9,563	24,624	-17,972 	688	13,204	2,323	0 –	13,480
Finished Petroleum Products		_	932,377	49,571	20,016	22,761	-1,368		101,390	924,703	31,326
Finished Motor Gasoline		_	491,212	1,152	3,129	19,479	103		14,801	500,068	2,262
Reformulated		_	344.836	,		-28	0		- 1,551	344,808	16
Conventional		_	146,376	1,152	3,129	19,507	103		14,801	155,260	2,246
Finished Aviation Gasoline			311	20	180	, , , , , , , , , , , , , , , , , , ,	80		´ –	431	273
Kerosene-Type Jet Fuel			138,416	29,083	2,489		240		8,988	160,760	9,443
Kerosene			104	55	_		-12		31	140	35
Distillate Fuel Oil			166,041	3,887	10,081	3,282	-1,280		29,182	155,389	11,555
15 ppm sulfur and under			158,695	3,789	10,081	3,282	-1,289		17,919	159,217	10,561
Greater than 15 ppm to 500 ppm sulfur			3,020	_	_		12		2,259	749	279
Greater than 500 ppm sulfur			4,326	98	_		-3		9,004	-4,577	715
Residual Fuel Oil <sup>6</sup> Less than 0.31 percent sulfur			34,701 44	12,898	_		-315 -36		5,744 NA	42,170 NA	4,163 98
0.31 to 1.00 percent sulfur			6,184	1,157	_		-366		NA NA	NA NA	483
Greater than 1.00 percent sulfur			28,473	11,741	_		-300		NA NA	NA NA	3,576
Petrochemical Feedstocks			20,473		_		1			371	2,370
Naphtha for Petro. Feed. Use			29	311	_		1			339	2
Other Oils for Petro. Feed. Use			_	32	_					32	_
Special Naphthas			270	45	-		30			285	59
Lubricants			6,011	523	-495		203		2,783	3,053	801
Waxes			_	333	-		_		60	273	_
Petroleum Coke			46,028	285	544		137		39,504	7,216	1,350
Marketable			35,590	285	544		137		39,504	-3,222	1,350
Catalyst			10,438		4.000					10,438	1 001
Asphalt and Road Oil			7,874	945	4,088		-580		296	13,191	1,281
Still Gas			37,204 4,176	2			 25		3	37,204 4,150	102
			952,569	1							

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

<sup>6</sup> Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks.

O Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other

Table 23. PAD District 5 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2017 (Thousand Barrels per Day)

			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	993			1,254	154	7	134	2,274	_	0
Hydrocarbon Gas Liquids	67	0	57	41	31		8	100	24	64
Natural Gas Liquids		0	51	41	31		6	100	24	59
Ethane			-	_	-		_		0	0
Propane			39	29	11		0		22	68
Normal Butane			4	12	14		5	33	2	5
Isobutane			8	1	7		2	39	_	-17
Natural Gasoline		0	7	_	_		0 2	28	0	3 5
Refinery Olefins Ethylene				_	_		_			5
Propylene			8	_	_		0			8
Butylene			-1	_	_		2			-3
Isobutylene			_	_	-		0			0
Other Liquids		29		210	300	-60	-56	539	8	-12
Other Hydrocarbons		29		19	163	12	-2	223	2	0
Hydrogen				_	_	43		43	_	0
Oxygenates (excluding Fuel Ethanol)		_		-	-	0	-	-	0	0
Renewable Fuels (including Fuel Ethanol)		29		19	163	-31	-2	180	2	0
Fuel Ethanol		20		_	151	-13	-4	161	1	0
Renewable Fuels Except Fuel Ethanol		9		19	12	-18	3	19	0	0
Other Hydrocarbons				175	_		-17	200	5	- -12
Motor Gasoline Blend.Comp. (MGBC)				1/5	137	-72	-17	117	2	-12
Reformulated		_		_	62	4	-16	82	0	Ö
Conventional		_		16	75	-76	-21	35	2	0
Aviation Gasoline Blend. Comp				-	-		-	-	-	-
Finished Petroleum Products		_	3.049	157	55	96	-104		352	3,109
Finished Motor Gasoline		_	1,616	1	13	85	1		41	1,673
Reformulated		_	1,138	_	-	-1	0		-	1,137
Conventional		_	478	1	13	86	1		41	536
Finished Aviation Gasoline			2	0	-		1		-	1
Kerosene-Type Jet Fuel			407	112	7		-29		15	541
Kerosene			0	_	22		1		0	-1
Distillate Fuel Oil			566 541	11 11	22	11 11	-30 -26		113 59	527 552
15 ppm sulfur and under Greater than 15 ppm to 500 ppm sulfur			10	11			-20		7	1
Greater than 500 ppm sulfur			10	0	_		-6		46	-26
Residual Fuel Oil <sup>6</sup>			132	26	_		-34		27	166
Less than 0.31 percent sulfur			52		-		-12		NA	NA
0.31 to 1.00 percent sulfur			17	3	_		-9		NA	NA
Greater than 1.00 percent sulfur			116	22	_		-14		NA	NA
Petrochemical Feedstocks			0		_		0			1
Naphtha for Petro. Feed. Use			0	1	_		0			1
Other Oils for Petro. Feed. Use			_	_	-		_ 0			_ 0
Special Naphthas Lubricants			1 23		-4		-3		 11	11
Waxes			23	1	-4		-3		0	1
Petroleum Coke			138		3		-5		144	3
Marketable			102	1	3		-5		144	-33
Catalyst			36							36
Asphalt and Road Oil			28	2	15		-6		1	50
Still Gas			120							120
Miscellaneous Products			14	0	-		0		0	14
Total	1,060	29	3,106	1,663	541	43	-19	2,914	385	3,161

<sup>=</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January

<sup>2005 (</sup>see explanatory notes).

5 Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

6 Total residual fuel cities stocks and stock change include stocks hald at pipeling

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change. Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board, and other

Table 24. PAD District 5 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2017 (Thousand Barrels per Day)

(Thousand Barrels per Day)			Sup	ply				Dispo	sition	
Commodity	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) <sup>1</sup>	Net Receipts <sup>2</sup>	Adjust- ments <sup>3</sup>	Stock Change <sup>4</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>5</sup>
Crude Oil	984			1,224	143	76	2	2,409	15	0
Hydrocarbon Gas Liquids	65	0	66	33	26		6	83	42	60
Natural Gas Liquids	65	0	57	33	26		6	83	42	51
Ethane	0		-	-	-		-		0	0
Propane	11		38	28	10		2		30	53
Normal Butane	10 13		15 4	5 0	11 5		3	28 27	11 0	-1 -5
Isobutane Natural Gasoline	31	0		0	5		0	27	0	3
Refinery Olefins			9	_	_		0			9
Ethylene			_	-	-		_			_
Propylene			9	_	-		0			9
Butylene			0	-	_		0			0
Isobutylene			_	_	_		0			0
Other Liquids		28		171	318	-39	2	450	18	6
Other Hydrocarbons		28		20	158	20	0	221	6	0
Hydrogen				-	-	39		39	-	0
Oxygenates (excluding Fuel Ethanol)		_		_	-	0	_	-	0	0
Renewable Fuels (including Fuel Ethanol) Fuel Ethanol		28 20		20 4	158 147	-19 -4	0	182 160	6 5	0
Renewable Fuels Except Fuel Ethanol		8		16	11	-14	-1	22	1	0
Other Hydrocarbons				-	-	-14				_
Unfinished Oils				118	-		7	100	5	6
Motor Gasoline Blend.Comp. (MGBC)		-		32	160	-60	-4	129	8	0
Reformulated		_		1	79	-1	-6	85	0	0
Conventional Aviation Gasoline Blend. Comp				31 -	81 -	-59 	2	43 -	8 -	0 –
							_			
Finished Petroleum Products		_	<b>3,067</b> 1,616	163	66	<b>75</b> 64	<b>-5</b> 0		334	3,042
Finished Motor Gasoline		_	1,134	4	10	04	0		49	1,645 1,134
Conventional		_	482	4	10	64	0		49	511
Finished Aviation Gasoline			1	0	10		0		-	1
Kerosene-Type Jet Fuel			455	96	8		1		30	529
Kerosene			0	0	_		0		0	0
Distillate Fuel Oil			546	13	33	11	-4		96	511
15 ppm sulfur and under			522	12	33	11	-4		59	524
Greater than 15 ppm to 500 ppm sulfur  Greater than 500 ppm sulfur			10 14	- 0	_		0		7 30	2 -15
Residual Fuel Oil <sup>6</sup>			114	42	_		-1		19	139
Less than 0.31 percent sulfur			0	-	_		0		NA	NA
0.31 to 1.00 percent sulfur			20	4	_		-1		NA	NA
Greater than 1.00 percent sulfur			94	39	_		0		NA	NA
Petrochemical Feedstocks			0	1	-		0			1
Naphtha for Petro. Feed. Use			0	1	_		0			1
Other Oils for Petro. Feed. Use			1	0	_		- 0			0
Special Naphthas Lubricants			20	2	-2		1		9	10
Waxes				1			_		0	10
Petroleum Coke			151	1	2		0		130	24
Marketable			117	1	2		0		130	-11
Catalyst			34							34
Asphalt and Road Oil			26	3	13		-2		1	43
Still Gas			122 14	 0			 0		 0	122 14
	1 040	00			FE0	444		0.040		
Total	1,049	28	3,133	1,591	553	111	6	2,942	409	3,108

<sup>-- =</sup> Not Applicable.

<sup>=</sup> No Data Reported.

NA = Not Available.

<sup>1</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>3</sup> Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

<sup>&</sup>lt;sup>4</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

<sup>&</sup>lt;sup>5</sup> Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Beginning the least of the production of th

Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other interpretion.

Table 25. Crude Oil Supply, Disposition, and Ending Stocks by PAD District, October 2017 (Thousand Barrels, Except Where Noted)

		P	AD Districts			U.S. Total		
Process	1	2	3	4	5	Total	Daily Average	
Supply								
Field Production	1,749	57,735	184,490	23,969	30,790	298,732	9,637	
Alaskan					_	15,705	507	
Lower 48 States	_	_	_	_	_	283,027	9.130	
Imports (PAD District of Entry)	32,208	76,984	77,267	10,601	38,886	235,946	7.61	
Commercial	32,208	76,984	77,267	10,601	38,886	235,946	7,61	
Strategic Petroleum Reserve (SPR)	02,200	70,001	77,207	10,001	-	200,010	7,01	
Net Receipts	3,500	-16,469	21,932	-13,727	4,764	_	_	
Adjustments <sup>1</sup>	-1,705	-4,043	9,581	-1,855	219	2.197	71	
Adjustments	-1,705	-4,043	9,561	-1,655	219	2,197	71	
Disposition								
Stock Change <sup>2</sup>	1,771	4,402	-24,620	-383	4,153	-14,677	-473	
Commercial	-	-	-19,931	-	-	-9,988	-322	
SPR	-	-	-4,689	-	-	-4,689	-151	
Refinery Inputs	33,981	105,756	268,318	19,332	70,506	497,893	16,061	
Exports	-	4,049	49,571	39	-	53,659	1,731	
Ending Stocks								
Total	13,740	153,755	887,456	20,685	52,377	1.128.013		
Commercial	13,740	153,755	218,505	20,685	52,377	459,062		
Refinery	11,119	14,071	45,459	2,373	24,394	97,416		
Tank Farms and Pipelines	2,621	139,684	173,046	18,312	23,086	356.749		
Cushing, Oklahoma	2,021	65.122	173,040	10,312	25,000	65.122		
		05,122				05,122		
Lease	_	_	_	_	4 007	4.007		
Alaskan Crude Oil In-Transit by Water	-	-	-	-	4,897	4,897		
SPR	-	-	668,951	-	-	668,951		
SPR Stocks								
Percent of Total Crude Oil Stocks (Percent)						59.3		
Percent of Total Petroleum Stocks (Percent)						34.4		
Days of Total Petroleum Net Imports (Days)						268		
SPR Receipts Detail								
Receipts	_	_	_	_	_	_	_	
Domestic				_			_	
Imports			_	_		_	_	
Imported by SPR		_		_	_	_	_	
Imported by SPR Imported for SPR by Others	_	-	_	-		_		
imported for SFR by Others	_	_	-	-	_		_	
Imports								
PAD District of Entry	32,208	76,984	77,267	10,601	38,886	235,946	7,61	
PAD District of Processing	33,459	68,179	86,614	8.398	39,296	235,946	7,61	

<sup>=</sup> Not Applicable.

Notes: Totals may not equal the sum of components due to independent rounding. Values of Domestic Crude Oil Field Production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movements Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

<sup>=</sup> No Data Reported.

Crude oil adjustment was previously referred to as Unaccounted-for Crude Oil.

<sup>&</sup>lt;sup>2</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Table 26. Production of Crude Oil by PAD District and State, October 2017 (Thousand Barrels)

PAD District and State		2017	January-October 2017			
PAD District and State	Total	Daily Average	Total	Daily Average		
PAD District 1	1,749	56	14,612	48		
Florida	153	5	1,612	Ę		
New York	19	1	184	1		
Pennsylvania	660	21	5,281	17		
Virginia	0	0	4	(		
West Virginia	917	30	7,531	25		
PAD District 2	57,735	1.862	515,808	1,697		
Illinois	696	22	6,912	23		
Indiana	149	5	1.489	į		
Kansas	2,947	95	29,819	98		
Kentucky	196	6	2,098			
Michigan	473	15	4.521	15		
Missouri	9	0	93	(		
Nebraska	201	6	1,945			
North Dakota	36,082	1,164	317,134	1.043		
Ohio	1,610	52	15,446	5		
Oklahoma	15,235	491	135.035	444		
South Dakota	112	4	1,095			
Tennessee	25	1	220			
PAD District 3	184,490	5,951	1,752,225	5,764		
Alabama	532	17	5.686	3,73-		
Arkansas	441	14	4,299	14		
Louisiana	3,928	127	42,025	13		
Mississippi	1,523	49	15,258	50		
New Mexico	16,367	528	139.606	45		
Texas	116,792	3,767	1,042,132	3,428		
Federal Offshore PAD District 3	44,907	1,449	503,219	1,65		
PAD District 4	23,969	773	208.621	680		
Colorado	12,485	403	102.322	337		
Idaho	12,465	0	84	33		
	-	54		5(		
Montana	1,673 2,896	93	17,033 27,374	90		
Utah Wyoming	6,909	223	61,808	20		
DAD District 5	20.700	993	200 140	00		
PAD District 5	<b>30,790</b> 15.705	993 507	<b>299,142</b> 149.287	<b>98</b> 4		
	-,		-, -	49		
South Alaska	496	16	4,293			
North Slope	15,209	491 0	144,993	47		
Arizona	— I	-	11	470		
California	14,593	471	144,811			
Nevada	24	1	240			
Federal Offshore PAD District 5	465	15	4,792	10		
U.S. Total	298,732	9,637	2,790,407	9,179		

= No Data Reported.

Note: Year-to-date totals include revised monthly production estimates by state published in Petroleum Navigator. Crude oil production quantities are estimated by state and summed to the PADD and the U.S. level. State production estimates reported by EIA are normally different from data reported by state agencies. For example, production estimates for Texas reported on table 26 are different from production reported by the Railroad Commission of Texas. See EIA "Today In Energy" article released on July 10, 2015 (http://www.eia.gov/todayinenergy/detail.cfm?id=22012) for an explanation of differences in production data for Texas. Totals may not equal sum of components due to independent

Sources: Energy Information Administration Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report," state government agencies, U.S. Department of the Interior, and the Bureau of Ocean Energy Management.

Table 27. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels)

	Production									
	PAD	District 1 - East C	oast	PAD District 2 - Midwest						
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total			
Hydrocarbon Gas Liquids	8	14,044	14,052	5,953	7,338	15,139	28,430			
Natural Gas Liquids	8	14,044	14,052	5,953	7,338	15,139	28,430			
Ethane	-	5,847	5,847	2,127	1,899	6,038	10,064			
Propane	2	4,711	4,713	2,399	2,835	4,860	10,094			
Normal Butane	6	1,403	1,409	587	1,228	1,714	3,529			
Isobutane	-	715	715	409	338	797	1,544			
Natural Gasoline	-	1,368	1,368	431	1,038	1,730	3,199			

					Production				
			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Hydrocarbon Gas Liquids	47,059	6,031	5,145	1,000	6,365	65,600	12,840	2,071	122,993
Natural Gas Liquids	47,059	6,031	5,145		6,365	65,600	12,840	2,071	122,993
Ethane	19,777	3,036	2,113	386	2,766	28,078	4,033	1	48,023
Propane	14,409	1,579	1,586	221	1,930	19,725	4,426	321	39,279
Normal Butane	4,878	-2,632	546	94	554	3,440	1,721	479	10,578
Isobutane	2,872	3,542	332	78	462	7,286	783	275	10,603
Natural Gasoline	5,123	506	568	221	653	7,071	1,877	995	14,510

	Stocks									
	PAD	District 1 - East C	oast		PAD District 2 - Midwest					
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total			
Hydrocarbon Gas Liquids	6	245	251	1,200	106	601	1,907			
Natural Gas Liquids	6	245	251	1,200	106	601	1,907			
Ethane	-	_	_	86	2	158	246			
Propane	3	125	128	664	39	187	890			
Normal Butane	3	45	48	206	23	113	342			
Isobutane	-	14	14	158	4	72	234			
Natural Gasoline	-	61	61	86	38	71	195			

	Stocks									
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total	
Hydrocarbon Gas Liquids	238	2,839	1,077	25	_	4,179	145	553	7,035	
Natural Gas Liquids	238	2,839	1,077	25	_	4,179	145	553	7,035	
Ethane	27	1,003	_	-	-	1,030	2	-	1,278	
Propane	96	1,383	15	17	-	1,511	56	55	2,640	
Normal Butane	59	210	912	5	_	1,186	33	440	2,049	
Isobutane	27	198	43	-	-	268	11	19	546	
Natural Gasoline	29	45	107	3	_	184	43	39	522	

<sup>- =</sup> No Data Reported.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."

Table 28. Refinery and Blender Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels)

	PAD	District 1 - East C	oast		PAD District	2 - Midwest	
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	31,238	2,743	33,981	67,044	16,953	21,759	105,756
Hydrocarbon Gas Liquids	1.568	_	1.568	1.916	156	1.376	3.448
Natural Gas Liquids	1,568	_	1,568	1,916		1,376	3,448
Normal Butane	966	_	966	802	91	382	1.275
Isobutane	464	_	464	875	47	361	1,283
Natural Gasoline	138	-	138	239	18	633	890
Other Liquids	76,897	6,598	83,495	16,076	2,660	4,070	22,806
Hydrogen/Oxygenates/Renewables/	10.082	807	10.889	5.970	1 555	1.857	9.382
Other Hydrocarbons	98	807	10,889	673	1,555 299	202	9,362
Oxygenates (excluding Fuel Ethanol)	90	4	102	0/3	299	202	1,174
Methyl Tertiary Butyl Ether (MTBE)	_	_	_	_	_	_	_
All Other Oxygenates <sup>1</sup>	_	_	_	_	_	_	
Renewable Fuels (including Fuel Ethanol)	9.984	803	10.787	5,274	1.256	1.655	8.185
Fuel Ethanol	9,773	750	10,767	4,981	1,168	1,585	7,734
Renewable Diesel Fuel	211	53	264	293	88	70	451
Other Renewable Fuels		_	_	_	_	-	-
Other Hydrocarbons	_	_	_	23	_	_	23
Unfinished Oils (net)	1,528	-71	1,457	1,541	-154	-310	1,077
Naphthas and Lighter	481	9	490	883	-80	122	925
Kerosene and Light Gas Oils	-277	-	-277	-282	-129	-193	-604
Heavy Gas Oils	953	-76	877	1,411	52	-249	1,214
Residuum	371	-4	367	-471	3	10	-458
Motor Gasoline Blend.Comp. (MGBC)(net)	65,287	5,862	71,149	8,565	1,259	2,523	12,347
Reformulated - RBOB	17,199	94	17,293	-108	998	954	1,844
Conventional	48,088	5,768	53,856	8,673	261	1,569	10,503
CBOB	40,801	5,752	46,553	9,442	300	1,666	11,408
GTAB	2,416	-	2,416	_	_	_	_
Other	4,871	16	4,887	-769	-39	-97	-905
Aviation Gasoline Blend. Comp. (net)	-	-	_	_	_	-	_
Total Input	109,703	9,341	119,044	85,036	19,769	27,205	132,010

See footnotes at end of table.

Table 28. Refinery and Blender Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels) - Continued

			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Crude Oil	19,601	135,654	101,796	6,986	4,281	268,318	19,332	70,506	497,893
Hydrocarbon Gas Liquids	518	4,637	4,124	76	195	9,550	680	3,100	18,346
Natural Gas Liquids	518	4,637	4,124	76	195	9,550	680	3,100	18,346
Normal Butane	249	1.380	1.405	43	8	3,085	259	1.020	6.605
Isobutane	81	1,664	1,361	31	187	3,324	230	1,199	6,500
Natural Gasoline	188	1,593	1,358	2	-	3,141	191	881	5,241
Other Liquids	9,801	-38,052	-26,685	7,628	-403	-47,711	-1,197	16,720	74,113
Hydrogen/Oxygenates/Renewables/	0.450	0.070	0.007	1 010	0.47	0.000	1 100	0.000	07.000
Other Hydrocarbons	2,150 23	3,370 2.343	2,307 1.656	1,212 79	247 46	9,286 4,147	1,169 226	6,900 1,334	37,626 6.983
Hydrogen	23	2,343	1,000	79	40	4,147	220	1,334	6,983
Oxygenates (excluding Fuel Ethanol)	_	_	_	_	_	_	_	_	_
All Other Oxygenates <sup>1</sup>	_	_	_	_	_	_	_	_	_
Renewable Fuels (including Fuel Ethanol)	2.127	1.027	651	1.133	201	5.139	943	5.566	30.620
Fuel Ethanol	2.021	903	469	1.036	169	4,598	905	4.984	28,744
Renewable Diesel Fuel	106	124	182	97	32	541	38	577	1.871
Other Renewable Fuels	-	124	102	-	-	341	-	5	1,071
Other Hydrocarbons	_	_	_	_	_	_	_	_	23
Unfinished Oils (net)	-606	-1.830	8.384	-118	80	5.910	-286	6.196	14,354
Naphthas and Lighter	-214	-5.955	-520	22	-8	-6,675	4	-389	-5.645
Kerosene and Light Gas Oils	-255	-1.867	1.172	-55	63	-942	-157	-149	-2.129
Heavy Gas Oils	-144	5,490	7,275	-23	25	12,623	45	6,131	20,890
Residuum	7	502	457	-62		904	-178	603	1.238
Motor Gasoline Blend.Comp. (MGBC)(net)	8,256	-39.592	-37.376	6.534	-730	-62.908	-2,080	3.624	22.132
Reformulated - RBOB	6,362	-10.053	-3,608	-	-728	-8,027	_,;;;	2.546	13,656
Conventional	1.894	-29,539	-33.768	6,534	-2	-54.881	-2.080	1,078	8,476
CBOB	1,724	-31,665	-32,776	6,524	126	-56,067	-1,705	761	950
GTAB	_	_	_	_	-	_	_	-	2,416
Other	170	2,126	-992	10	-128	1,186	-375	317	5,110
Aviation Gasoline Blend. Comp. (net)	1	_	_	-	-	1	-	-	1
Total Input	29,920	102,239	79,235	14,690	4,073	230,157	18,815	90,326	590,352

Note: Totals may not equal sum of components due to independent rounding.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

<sup>=</sup> No Data Reported.

1 Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Table 29. Refinery and Blender Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels)

	PAD	District 1 - East C	oast		PAD District	2 - Midwest	
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hadron and an One Limite	500	47	544	0.050	10	004	0.500
Hydrocarbon Gas Liquids	528	-17	511	2,259	-12	281	2,528
Natural Gas Liquids	169	-17	152	924	-226	171	869
Ethane		_			_		
Propane	751	24	775	1,513	230	357	2,100
Normal Butane	-603	-18	-621	-567	-414	-156	-1,137
Isobutane	21	-23	-2	-22	-42	-30	-94
Natural Gasoline	-	-	-	-	-	-	-
Refinery Olefins	359	-	359	1,335	214	110	1,659
Ethylene	11	-	11	-	-	-	-
Propylene	419	-	419	1,047	214	110	1,371
Butylene	-109	-	-109	288	_	_	288
Isobutylene	38	-	38	-	-	-	-
Finished Motor Gasoline	93,382	7,657	101,039	52,930	11,190	16,157	80,277
Reformulated	40,655	104	40,759	8,652	1,540	1,231	11,423
Reformulated Blended with Fuel Ethanol	40,655	104	40,759	8,652	1,540	1,231	11,423
Reformulated Other	_	_	_	_	_	, _	, <u> </u>
Conventional	52,727	7,553	60,280	44,278	9,650	14,926	68,854
Conventional Blended with Fuel Ethanol	56.042	7,369	63,411	40.680	9.958	14.292	64,930
Ed55 and Lower	56.003	7.369	63.372	40.671	9.931	14.227	64.829
Greater than Ed55	39	7,000	39	9	27	65	101
Conventional Other	-3,315	184	-3,131	3,598	-308	634	3,924
Finished Aviation Gasoline	0,010	104	0,101	0,000	17	-	17
Kerosene-Type Jet Fuel	2.952	_	2.952	6.424	790	624	7.838
Kerosene	2,932	_	2,932	125	790	-2	123
Distillate Fuel Oil	9.909	746	10,655	16,911	5.903	8,763	31,577
	- /	670	,	,	-,		,
15 ppm sulfur and under	8,484		9,154	16,913	5,931	8,857	31,701
Greater than 15 ppm to 500 ppm sulfur	-170	58	-112	-60	19	121	80
Greater than 500 ppm sulfur	1,595	18	1,613	58	-47	-215	-204
Residual Fuel Oil	1,217	2	1,219	1,185	221	79	1,485
Less than 0.31 percent sulfur	183	2	185	70	_	-	70
0.31 to 1.00 percent sulfur	405	-	405	174	71	-	245
Greater than 1.00 percent sulfur	629	-	629	941	150	79	1,170
Petrochemical Feedstocks	133	-	133	883	-	-	883
Naphtha for Petro. Feed. Use	133	-	133	673	_	-	673
Other Oils for Petro. Feed. Use	-	-	-	210	-	-	210
Special Naphthas	_	21	21	43	-	-	43
Lubricants	213	180	393	_	-	114	114
Waxes	-	-8	-8	-	-	21	21
Petroleum Coke	1,102	19	1,121	3,611	907	900	5,418
Marketable	400	_	400	2,551	727	740	4,018
Catalyst	702	19	721	1,060	180	160	1,400
Asphalt and Road Oil	574	647	1,221	2,493	1,295	319	4,107
Still Gas	1,121	56	1,177	2.529	636	843	4.008
Miscellaneous Products	70	33	103	266	123	65	454
	"		100		"20		101
Total	111,229	9,336	120,565	89,659	21,070	28,164	138,893
Processing Gain(-) or Loss(+) <sup>1</sup>	-1,526	5	-1,521	-4,623	-1,301	-959	-6,883

See footnotes at end of table.

Table 29. Refinery and Blender Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels) — Continued

			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
I hadronoulous One I invide	370	5 000	F 000	00	47	40.074	007	4 770	10 100
Hydrocarbon Gas Liquids		5,232	5,323	29	17	10,971	327	1,772	16,109
Natural Gas Liquids	10	2,168	2,162	-17	18	4,341	305	1,568	7,235
Ethane	1	143	20	-	-	164	-		164
Propane	285	2,551	2,133	17	54	5,040	282	1,200	9,397
Normal Butane	-212	-57	-347	-34	-36	-686	4	113	-2,327
Isobutane	-64	-469	356	-	-	-177	19	255	1
Natural Gasoline	-	-		-	_	-	_	-	- 0.074
Refinery Olefins	360	3,064	3,161	46	-1	6,630	22	204	8,874
Ethylene	-	8		-	-	8	_	-	19
Propylene	357	3,372	3,208	46	-	6,983	3	246	9,022
Butylene	3	-302	-47	_	-1	-347	19	-42	-191
Isobutylene	_	-14	_	_	-	-14	_	-	24
Finished Motor Gasoline	21,124	25,158	15,137	9,691	1,941	73,051	9,040	50,102	313,509
Reformulated	7,791	7,115	-	-	-	14,906	-	35,285	102,373
Reformulated Blended with Fuel Ethanol	7,791	7,115	-	-	-	14,906	-	35,285	102,373
Reformulated Other	_	_	_	_	-	-	_	-	_
Conventional	13,333	18,043	15,137	9,691	1,941	58,145	9,040	14,817	211,136
Conventional Blended with Fuel Ethanol	12,376	1,780	4,608	10,286	1,701	30,751	9,033	14,398	182,523
Ed55 and Lower	12,362	1,780	4,608	10,275	1,701	30,726	9,017	14,395	182,339
Greater than Ed55	14	_	_	11	_	25	16	3	184
Conventional Other	957	16,263	10,529	-595	240	27,394	7	419	28,613
Finished Aviation Gasoline	75	74	55	-	-	204	6	63	290
Kerosene-Type Jet Fuel	1,329	11,950	11,890	242	-	25,411	1,105	12,629	49,935
Kerosene	10	-2	-5	19	-	22	_	12	185
Distillate Fuel Oil	5,691	43,149	34,953	2,465	1,920	88,178	6,255	17,537	154,202
15 ppm sulfur and under	5,677	41,294	29,126	2,365	1,920	80,382	6,155	16,770	144,162
Greater than 15 ppm to 500 ppm sulfur	14	364	2,149	52	-	2,579	50	318	2,915
Greater than 500 ppm sulfur	_	1,491	3,678	48	_	5,217	50	449	7,125
Residual Fuel Oil	334	2,456	4,064	-84	181	6,951	336	4,099	14,090
Less than 0.31 percent sulfur	260	12	926	_	_	1,198	181	-	1,634
0.31 to 1.00 percent sulfur	_	47	457	-84	21	441	21	518	1,630
Greater than 1.00 percent sulfur	74	2,397	2,681	-	160	5,312	134	3,581	10,826
Petrochemical Feedstocks	105	5,109	2,450	_	_	7,664	-	4	8,684
Naphtha for Petro. Feed. Use	102	3,267	1,252	-	_	4,621	_	4	5,431
Other Oils for Petro. Feed. Use	3	1,842	1,198	_	_	3,043	_	_	3,253
Special Naphthas	89	876	_	230	_	1,195	-	26	1,285
Lubricants	3	1,803	1,782	859	_	4,447	_	706	5,660
Waxes	-	55	40	17	_	112	-	-	125
Petroleum Coke	401	8,586	5,901	160	40	15,088	788	4,288	26,703
Marketable	204	6,610	4,513	145	-	11,472	559	3,171	19,620
Catalyst	197	1,976	1,388	15	40	3,616	229	1,117	7,083
Asphalt and Road Oil	241	380	1,090	750	-18	2,443	1,117	875	9,763
Still Gas	782	5,723	4,112	155	82	10,854	697	3,735	20,471
Miscellaneous Products	118	1,014	539	25	17	1,713	130	437	2,837
Total	30,672	111,563	87,331	14,558	4,180	248,304	19,801	96,285	623,848
Processing Gain(-) or Loss(+) <sup>1</sup>	-752	-9,324	-8,096	132	-107	-18,147	-986	-5,959	-33,496

= No Data Reported.
 1 Represents the arithmetic difference between input and production.
 Note: Refer to Appendix A for Refining District descriptions.
 Source: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 30. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels, Except Where Noted)

	PAD	District 1 - East Co	ast	PAD District 2 - Midwest					
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total		
Crude Oil	31,238	2,743	33,981	67,044	16,953	21,759	105,756		
Hydrocarbon Gas Liquids	686	_	686	1,733	47	954	2.734		
Natural Gas Liquids	686	-	686	1,733	47	954	2,734		
Normal Butane	222	_	222	619	_	44	663		
Isobutane	464	_	464	875	47	361	1,283		
Natural Gasoline	-	-	_	239	-	549	788		
Other Liquids	-14,788	46	-14,742	-30,093	-6,390	-9,850	-46,333		
Hydrogen/Oxygenates/Renewables/	,		,	,	.,	-,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Other Hydrocarbons	177	119	296	943	491	297	1,731		
Hydrogen	98	4	102	673	299	202	1,174		
Oxygenates (excluding Fuel Ethanol)	-	7		373		202	1,174		
Methyl Tertiary Butyl Ether (MTBE)	_	_	_	_	_				
	-	_	_	_	_	-	_		
All Other Oxygenates <sup>1</sup>	-	-	-	-	-	-	-		
Renewable Fuels (including Fuel Ethanol)	79	115	194	247	192	95	534		
Fuel Ethanol	79	94	173	157	168	89	414		
Renewable Diesel Fuel	-	21	21	90	24	6	120		
Other Renewable Fuels	-	-	-	-	-	-	-		
Other Hydrocarbons	_	-	_	23	-	-	23		
Unfinished Oils (net)	1,527	-71	1,456	1,472	-154	-310	1,008		
Naphthas and Lighter	481	9	490	883	-80	122	925		
Kerosene and Light Gas Oils	-277	_	-277	-282	-129	-193	-604		
Heavy Gas Oils	952	-76	876	1,411	52	-249	1,214		
Residuum	371	-4	367	-540	3	10	-527		
Motor Gasoline Blend.Comp. (MGBC)(net)	-16,492	-2	-16,494	-32,508	-6,727	-9,837	-49,072		
Reformulated - RBOB	-10,492	-2	-10,494	-7,700	-388	-150	-8,238		
	,	-2	,	,			,		
Conventional	-5,885	-	-5,887	-24,808	-6,339	-9,687	-40,834		
CBOB	-5,757	-18	-5,775	-24,034	-6,300	-9,581	-39,915		
GTAB	-	-	_	-	-	_			
Other	-128	16	-112	-774	-39	-106	-919		
Aviation Gasoline Blend. Comp. (net)	-	-	_	_	-	-	-		
Total Input to Refineries	17,136	2,789	19,925	38,684	10,610	12,863	62,157		
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	1,001	89	1,090	2,147	548	702	3,398		
Operable Capacity (daily average)	1,083	98	1,182	2,607	520	886	4,013		
Operable Utilization Rate (percent) <sup>2</sup>	92.4	90.6	92.3	82.4	105.5	79.3	84.7		
Downstream Processing Fresh Feed Input (daily average)									
Catalytic Reforming	176	16	192	429	82	133	644		
Catalytic Cracking	394	16	410	713	155	163	1,031		
Catalytic Hydrocracking	27	10	27	213	55	49	317		
Delayed and Fluid Coking	52	_	52	282	69	86	438		
Delayed and Fluid Coking	32	-	32	202	09	80	430		
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.80	1.78	0.87	1.46	1.73	0.85	1.38		
API Gravity, Weighted Average (degrees)	36.24	31.19	35.84	32.31	27.84	36.70	32.45		
Operable Capacity (daily average)	1,083	98	1,182	2,607	520	886	4,013		
Operating	1,083	98	1,182	2,585	520	816	3,921		
Idle	-	-	_	22	-	70	92		
Alaskan Crude Oil Receipts	_	_	=	_	_	_	-		

Table 30. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels, Except Where Noted) — Continued

			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Crude Oil	19,601	135,654	101,796	6,986	4,281	268,318	19,332	70,506	497,893
Hydrocarbon Gas Liquids	463	3,677	4.093	33	195	8,461	586	3,065	15,532
Natural Gas Liquids	463	3,677	4,093	33	195	8,461	586	3,065	15,532
Normal Butane	211	986	1,374	-	8	2,579	208	985	4.657
Isobutane	81	1,664	1,361	31	187	3,324	226	1,199	6.496
Natural Gasoline	171	1,027	1,358	2	-	2,558	152	881	4,379
Other Liquids	-8,009	-50,341	-29,548	-1,636	-1,557	-91,091	-5,662	-30.735	-188,563
Hydrogen/Oxygenates/Renewables/	0,003	30,041	25,540	-1,000	1,557	31,031	3,002	00,703	100,000
Other Hydrocarbons	272	2,407	2,016	141	113	4,949	517	1,517	9,010
Hydrogen	23	2,343	1,656	79	46	4,147	226	1,334	6,983
Oxygenates (excluding Fuel Ethanol)		_	,,,,,	_	_	_	_	_	
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	_	-	_
All Other Oxygenates <sup>1</sup>	_	_	_	-	-	_	_	_	_
Renewable Fuels (including Fuel Ethanol)	249	64	360	62	67	802	291	183	2,004
Fuel Ethanol	214	49	178	31	54	526	270	81	1,464
Renewable Diesel Fuel	35	15	182	31	13	276	21	102	540
Other Renewable Fuels	-	_	_	-	-	-	_	-	-
Other Hydrocarbons	-	_	_	-	-	-	_	_	23
Unfinished Oils (net)	-606	-1,830	8,380	-118	80	5,906	-286	6,197	14,281
Naphthas and Lighter	-214	-5,955	-520	22	-8	-6,675	4	-388	-5,644
Kerosene and Light Gas Oils	-255	-1,867	1,168	-55	63	-946	-157	-149	-2,133
Heavy Gas Oils	-144	5,490	7,275	-23	25	12,623	45	6,131	20,889
Residuum	7	502	457	-62	-	904	-178	603	1,169
Motor Gasoline Blend.Comp. (MGBC)(net)	-7,676	-50,918	-39,944	-1,659	-1,750	-101,947	-5,893	-38,449	-211,855
Reformulated - RBOB	-634	-15,569	-3,608	- 4.050	-728	-20,539		-28,687	-68,071
Conventional	-7,042	-35,349	-36,336	-1,659	-1,022	-81,408	-5,893	-9,762	-143,784
CBOB	-7,212	-31,897	-34,362	-1,625	-894	-75,990	-5,517	-10,088	-137,285
GTAB Other	170	-3,452	-1,974	-34	-128	-5,418	-376	326	-6.499
Aviation Gasoline Blend. Comp. (net)	170	-3,452	-1,974	-34	-120	-5,416	-3/0	320	-6,499 1
Total Input to Refineries	12,055	88,990	76,341	5,383	2,919	185.688	14,256	42.836	324,862
·	,		-,-	.,	,	,	,	,,,,,,	, , , , ,
Atmospheric Crude Oil Distillation	635	4.428	3.386	203	138	8.791	622	2.442	16.343
Gross Input (daily average)  Operable Capacity (daily average)	731	4,428	3,386	203 256	124	9,769	693	2,442	18,504
Operable Utilization Rate (percent) <sup>2</sup>	86.9	89.3	91.5	79.3	111.8	90.0	89.8	85.7	88.3
Operable Offization rate (percent)	00.9	69.3	91.5	79.5	111.0	90.0	09.0	65.7	66.3
Downstream Processing Fresh Feed Input (daily average)									
Catalytic Reforming	137	665	556	34	29	1,421	92	382	2.732
Catalytic Cracking	161	1,304	1.063	19	34	2,580	168	775	4.964
Catalytic Hydrocracking	47	501	443	17	18	1.025	20	496	1,884
Delayed and Fluid Coking	29	723	504	28	-	1,283	59	407	2,238
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.65	1.53	1.35	1.66	0.69	1.39	1.43	1.41	1.35
API Gravity, Weighted Average (degrees)	38.91	31.71	30.77	30.84	39.79	32.00	33.18	28.51	31.88
Operable Capacity (daily average)	731	4,959	3,699	256	124	9,769	693	2,848	18,504
Operating	731	4,959	3,699	256	124	9,769	683	2,703	18,258
ldle	-	_	_	-	-	-	10	145	247
Alaskan Crude Oil Receipts	_	_	_	_	_	_	_	13.068	13.068
								10,000	,

<sup>- =</sup> No Data Reported.

NA = Not Available.

Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Represents gross input divided by operable calendar day capacity.

Note: Totals may not equal sum of components due to independent rounding.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 31. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels)

	PAD	District 1 - East C	oast	PAD District 2 - Midwest					
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total		
Hydrocarbon Gas Liquids	528	-17	511	2.259	-12	281	2.528		
Natural Gas Liquids	169	-17	152	924	-226	171	869		
Ethane	105	.,	102	JZ		171	00.		
Propane	751	24	775	1,513	230	357	2.10		
Normal Butane	-603	-18	-621	-567	-414	-156	-1.13		
Isobutane	21	-23	-2	-22	-42	-30	-9		
Natural Gasoline	-	-20	-2	-22	-42	-50	-3.		
Refinery Olefins	359	_	359	1,335	214	110	1,65		
Ethylene	11	_	11	1,555	214	110	1,00		
Propylene	419	_	419	1,047	214	110	1,37		
Butylene	-109	-	-109	1,047	214	110	1,37		
		_		200	_	_	28		
Isobutylene	38 787	1.138	38 1.925	6.843	2.098	1.873	10.81		
Finished Motor Gasoline		1,138	,	6,843	2,098	1,8/3	10,81		
Reformulated	787	-	787	_	_	-			
Reformulated Blended with Fuel Ethanol	787	-	787	_	-	-			
Reformulated Other	-			-	-				
Conventional	-	1,138	1,138	6,843	2,098	1,873	10,81		
Conventional Blended with Fuel Ethanol	-	940	940	1,600	1,677	910	4,18		
Ed55 and Lower	-	940	940	1,600	1,677	910	4,18		
Greater than Ed55	-	-	-	-	-	-			
Conventional Other	-	198	198	5,243	421	963	6,62		
Finished Aviation Gasoline	-	-	-	-	17	-	1		
Kerosene-Type Jet Fuel	2,978	-	2,978	6,438	790	625	7,85		
Kerosene	7	-	7	125	_	-2	12		
Distillate Fuel Oil	9,933	714	10,647	16,696	5,838	8,700	31,23		
15 ppm sulfur and under	8,452	638	9,090	16,698	5,866	8,794	31,35		
Greater than 15 ppm to 500 ppm sulfur	-22	58	36	-60	19	2	-3		
Greater than 500 ppm sulfur	1,503	18	1,521	58	-47	-96	-8		
Residual Fuel Oil	1,216	2	1,218	1,185	221	79	1,48		
Less than 0.31 percent sulfur	182	2	184	70	-	-	7		
0.31 to 1.00 percent sulfur	404	_	404	174	71	_	24		
Greater than 1.00 percent sulfur	630	_	630	941	150	79	1,17		
Petrochemical Feedstocks	133	_	133	883	_	_	88		
Naphtha for Petro. Feed. Use	133	-	133	673	_	-	67		
Other Oils for Petro. Feed. Use	_	-	-	210	_	_	21		
Special Naphthas	_	21	21	43	_	_	4		
Lubricants	213	180	393	_	_	114	11		
Waxes		-8	-8	_	_	21	2		
Petroleum Coke	1.102	19	1,121	3,611	907	900	5,41		
Marketable	400	_	400	2.551	727	740	4.01		
Catalyst	702	19	721	1,060	180	160	1,40		
Asphalt and Road Oil	573	647	1,220	2,424	1,295	318	4.03		
Still Gas	1,121	56	1,177	2,529	636	843	4.00		
Miscellaneous Products	70	33	103	2,329	123	65	4,00		
IVIISCEIIAITEOUS FIOUUCIS	70	33	103	200	123	65	45		
Total	18,661	2,785	21,446	43,302	11,913	13,817	69,03		
Processing Gain(-) or Loss(+) <sup>1</sup>	-1,525	4	-1,521	-4,618	-1,303	-954	-6,87		
				1					

Table 31. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels) - Continued

			PAD District 3	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Hydrocarbon Gas Liquids	370	5.232	5.323	29	17	10.971	327	1.772	16.109
Natural Gas Liquids	10	2,168	2,162	-17	18	4,341	305	1,568	7,235
Ethane	1	143	20	.,	-	164	_	1,500	164
Propane	285	2,551	2,133	17	54	5,040	282	1,200	9,397
Normal Butane	-212	-57	-347	-34	-36	-686	4	113	-2.327
Isobutane	-64	-469	356	-04	-50	-177	19	255	-2,527
Natural Gasoline	-04	-403	330	_	_	-177	19	200	'
Refinery Olefins	360	3,064	3,161	46	-1	6,630	22	204	8,874
Ethylene	300	3,064	3,101	40	-1	8	22	204	0,074
,	- 057	_	0.000	-	_	-	_	- 040	
Propylene	357	3,372	3,208	46	-1	6,983	3	246	9,022
Butylene	3	-302	-47	_	-1	-347	19	-42	-191
Isobutylene	-	-14	-	-	_	-14	_	-	24
Finished Motor Gasoline	3,327	12,017	12,246	450	806	28,846	4,501	3,084	49,170
Reformulated	-	-	_	-	-	_	-	555	1,342
Reformulated Blended with Fuel Ethanol	_	_	_	-	-	_	_	555	1,342
Reformulated Other	_	_	_	-	-	_	-	-	_
Conventional	3,327	12,017	12,246	450	806	28,846	4,501	2,529	47,828
Conventional Blended with Fuel Ethanol	2,099	484	1,724	326	535	5,168	2,784	292	13,371
Ed55 and Lower	2,095	484	1,724	326	535	5,164	2,784	292	13,367
Greater than Ed55	4	_	_	-	_	4	_	_	4
Conventional Other	1,228	11,533	10,522	124	271	23,678	1,717	2,237	34,457
Finished Aviation Gasoline	75	74	55	-	-	204	6	63	290
Kerosene-Type Jet Fuel	1,329	11,955	11,882	242	-	25,408	1,055	12,648	49,942
Kerosene	10	-2	-7	19	_	20	_	-2	148
Distillate Fuel Oil	5,621	43,036	34,963	2,400	1,901	87,921	6,288	17,060	153,150
15 ppm sulfur and under	5,607	41,186	29,136	2,300	1,901	80,130	6,188	16,305	143,071
Greater than 15 ppm to 500 ppm sulfur	14	364	2,149	52	_	2,579	50	318	2,944
Greater than 500 ppm sulfur	_	1,486	3,678	48	-	5,212	50	437	7,135
Residual Fuel Oil	334	2,456	4,085	-84	181	6,972	336	4,099	14,110
Less than 0.31 percent sulfur	260	13	926	_	_	1,199	181	_	1,634
0.31 to 1.00 percent sulfur	_	128	457	-84	21	522	21	518	1,710
Greater than 1.00 percent sulfur	74	2.315	2.702	_	160	5,251	134	3,581	10.766
Petrochemical Feedstocks	105	5.109	2.450	_	_	7.664	_	4	8.684
Naphtha for Petro. Feed. Use	102	3,267	1,252	_	_	4,621	_	4	5,431
Other Oils for Petro. Feed. Use	3	1,842	1,198	_	_	3,043	_	_	3,253
Special Naphthas	89	876	-,	230	_	1.195	_	26	1.285
Lubricants	3	1,803	1.782	859	_	4.447	_	706	5,660
Waxes	_	55	40	17	_	112	_	700	125
Petroleum Coke	401	8,586	5,901	160	40	15,088	788	4,288	26,703
Marketable	204	6.610	4.513	145	40	11.472	559	3.171	19.620
Catalyst	197	1,976	1,388	15	40	3,616	229	1,117	7,083
Asphalt and Road Oil	241	380	1,065	750	-18	2,418	1,117	875	9.667
Still Gas	782	5,723	4,112	155	-16 82	10,854	697	3,735	20,471
Miscellaneous Products		,	539	25	62 17	,	130	437	2,837
IVIISCEIIAITEUUS FTUUUCIS	118	1,014	539	25	17	1,713	130	43/	2,037
Total	12,805	98,314	84,436	5,252	3,026	203,833	15,245	48,795	358,351
Processing Gain(-) or Loss(+) <sup>1</sup>	-750	-9,324	-8,095	131	-107	-18,145	-989	-5,959	-33,489

= No Data Reported.
 1 Represents the arithmetic difference between input and production.
 Note: Refer to Appendix A for Refining District descriptions.
 Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 32. Blender Net Inputs of Petroleum Products by PAD District, October 2017 (Thousand Barrels)

	PAD	District 1 - East C	oast		PAD District	2 - Midwest	
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	882	-	882	183	109	422	714
Natural Gas Liquids	882	-	882	183	109	422	714
Normal Butane	744	-	744	183	91	338	612
Isobutane	-	-	-	-	-	-	-
Natural Gasoline	138	-	138	_	18	84	102
Other Liquids	91,685	6,552	98,237	46,169	9,050	13,920	69,139
Oxygenates/Renewables	9,905	688	10,593	5,027	1,064	1,560	7,651
Oxygenates (excluding Fuel Ethanol)		-	´ <b>-</b>		_	´ –	· –
Methyl Tertiary Butyl Ether (MTBE)	_	_	-	-	_	_	-
All Other Oxygenates <sup>1</sup>	-	-	-	_	-	-	-
Renewable Fuels (including Fuel Ethanol)	9.905	688	10.593	5,027	1.064	1.560	7,651
Fuel Ethanol	9,694	656	10,350	4,824	1,000	1,496	7,320
Renewable Diesel Fuel	211	32	243	203	64	64	331
Other Renewable Fuels	-	-	_	_	-	-	_
Unfinished Oils (net)	1	-	1	69	-	_	69
Naphthas and Lighter	-	-	_	_	-	-	_
Kerosene and Light Gas Oils	-	-	-	-	-	-	-
Heavy Gas Oils	1	-	1	-	_	-	-
Residuum	-	-	-	69	-	_	69
Motor Gasoline Blend.Comp. (MGBC)(net)	81,779	5,864	87,643	41,073	7,986	12,360	61,419
Reformulated - RBOB	27,806	94	27,900	7,592	1,386	1,104	10,082
Conventional	53,973	5,770	59,743	33,481	6,600	11,256	51,337
CBOB	46,558	5,770	52,328	33,476	6,600	11,247	51,323
GTAB	2,416		2,416	_	_	_	· -
Other	4,999	_	4,999	5	_	9	14
Aviation Gasoline Blend. Comp. (net)			´ <b>-</b>			_	
Total Input	92,567	6,552	99,119	46,352	9,159	14,342	69,853

			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Hydrocarbon Gas Liquids	55	960	31	43	_	1,089	94	35	2,814
Natural Gas Liquids	55	960	31	43	-	1,089	94	35	2,814
Normal Butane	38	394	31	43	-	506	51	35	1,948
Isobutane	-	-	_	-	-	-	4	-	4
Natural Gasoline	17	566	-	-	-	583	39	-	862
Other Liquids	17,810	12,289	2,863	9,264	1,154	43,380	4,465	47,455	262,676
Oxygenates/Renewables	1,878	963	291	1,071	134	4,337	652	5,383	28,616
Oxygenates (excluding Fuel Ethanol)	_	_	_	-	_	_	_	-	_
Methyl Tertiary Butyl Ether (MTBE)	_	_	_	-	-	_	-	_	-
All Other Oxygenates <sup>1</sup>	-	_	_	-	_	_	_	-	_
Renewable Fuels (including Fuel Ethanol)	1,878	963	291	1,071	134	4,337	652	5,383	28,616
Fuel Ethanol	1,807	854	291	1,005	115	4,072	635	4,903	27,280
Renewable Diesel Fuel	71	109	_	66	19	265	17	475	1,331
Other Renewable Fuels	-	_	_	-	_	_	_	5	5
Unfinished Oils (net)	-	_	4	-	_	4	_	-1	73
Naphthas and Lighter	-	_	_	-	_	_	_	-1	-1
Kerosene and Light Gas Oils	-	_	4	-	_	4	_	-	4
Heavy Gas Oils	_	-	_	-	_	-	_	-	1
Residuum	-	_	_	-	_	_	_	-	69
Motor Gasoline Blend.Comp. (MGBC)(net)	15,932	11,326	2,568	8,193	1,020	39,039	3,813	42,073	233,987
Reformulated - RBOB	6,996	5,516	_	-	_	12,512	_	31,233	81,727
Conventional	8,936	5,810	2,568	8,193	1,020	26,527	3,813	10,840	152,260
CBOB	8,936	232	1,586	8,149	1,020	19,923	3,812	10,849	138,235
GTAB	-	_	_	_	_	_	_	_	2,416
Other	-	5,578	982	44	_	6,604	1	-9	11,609
Aviation Gasoline Blend. Comp. (net)	_ 17,865	- 13,249	_ 2,894	9,307	_ 1,154	44,469	- 4,559	- 47,490	265,490

<sup>=</sup> No Data Reported.

<sup>=</sup> No Data Reported.

1 Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 33. Blender Net Production of Petroleum Products by PAD District, October 2017 (Thousand Barrels)

	PAD	District 1 - East Co	past	PAD District 2 - Midwest					
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total		
Finished Motor Gasoline	92.595	6.519	99.114	46.087	9.092	14.284	69.463		
Reformulated	39,868	104	39.972	8.652	1,540	1,231	11.423		
Reformulated Blended with Fuel Ethanol	39,868	104	39.972	8,652	1.540	1,231	11,423		
Reformulated Other	- 00,000	-	- 00,972	0,002	1,540	1,201	- 11,420		
Conventional	52.727	6.415	59.142	37,435	7,552	13.053	58.040		
Conventional Blended with Fuel Ethanol	56,042	6,429	62,471	39,080	8,281	13,382	60.743		
Ed55 and Lower	56.003	6.429	62,432	39.071	8.254	13.317	60,642		
Greater than Ed55	39	0,120	39	9	27	65	101		
Conventional Other	-3.315	-14	-3.329	-1.645	-729	-329	-2.703		
Finished Aviation Gasoline	- 0,010	-	- 0,020	- 1,010	-	-	2,700		
Kerosene-Type Jet Fuel	-26	_	-26	-14	_	-1	-15		
Kerosene	21	_	21		_	-			
Distillate Fuel Oil	-24	32	8	215	65	63	343		
15 ppm sulfur and under	32	32	64	215	65	63	343		
Greater than 15 ppm to 500 ppm sulfur	-148	0	-148		_	119	119		
Greater than 500 ppm sulfur	92	_	92	_	_	-119	-119		
Residual Fuel Oil	1	_	1	_	_	-	_		
Less than 0.31 percent sulfur	1	_	1	_	_	_	_		
0.31 to 1.00 percent sulfur	1	_	1	_	_	_	_		
Greater than 1.00 percent sulfur	-1	-	-1	-	-	-	_		
Special Naphthas	_	_	-	_	_	_	_		
Lubricants	-	-	-	-	-	-	_		
Asphalt and Road Oil	1	_	1	69	_	1	70		
Miscellaneous Products	-	-	-	-	-	-	-		
Total Production	92,568	6,551	99,119	46,357	9,157	14,347	69,861		
Processing Gain(-) or Loss(+) <sup>1</sup>	-1	1	0	-5	2	-5	-8		

			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Finished Motor Gasoline	17,797	13,141	2,891	9,241	1,135	44,205	4,539	47,018	264,339
Reformulated	7,791	7,115	_	_	_	14,906	_	34,730	101,031
Reformulated Blended with Fuel Ethanol	7,791	7,115	_	_	_	14,906	_	34,730	101,031
Reformulated Other			_	-	-	· –	-	· –	´ -
Conventional	10,006	6,026	2,891	9,241	1,135	29,299	4,539	12,288	163,308
Conventional Blended with Fuel Ethanol	10,277	1,296	2,884	9,960	1,166	25,583	6,249	14,106	169,152
Ed55 and Lower	10,267	1,296	2,884	9,949	1,166	25,562	6,233	14,103	168,972
Greater than Ed55	10	_	_	11	_	21	16	3	180
Conventional Other	-271	4,730	7	-719	-31	3,716	-1,710	-1,818	-5,844
Finished Aviation Gasoline	-	_	_	-	-	_	_	_	_
Kerosene-Type Jet Fuel	-	-5	8	_	-	3	50	-19	-7
Kerosene	_	_	2	-	_	2	_	14	37
Distillate Fuel Oil	70	113	-10	65	19	257	-33	477	1,052
15 ppm sulfur and under	70	108	-10	65	19	252	-33	465	1,091
Greater than 15 ppm to 500 ppm sulfur	-	_	_	-	-	-	-	-	-29
Greater than 500 ppm sulfur	_	5	_	-	-	5	_	12	-10
Residual Fuel Oil	-	0	-21	-	-	-21	-	-	-20
Less than 0.31 percent sulfur	_	-1	_	-	_	-1	_	_	0
0.31 to 1.00 percent sulfur	_	-81	_	-	_	-81	_	_	-80
Greater than 1.00 percent sulfur	-	82	-21	-	_	61	_	_	60
Special Naphthas	-	_	_	-	_	_	_	-	-
Lubricants	-	_	_	-	-	_	_	_	-
Asphalt and Road Oil	-	-	25	-	-	25	_	-	96
Miscellaneous Products	-	_	_	-	-	-	_	-	-
Total Production	17,867	13,249	2,895	9,306	1,154	44,471	4,556	47,490	265,497
Processing Gain(-) or Loss(+) <sup>1</sup>	-2	0	-1	1	0	-2	3	0	-7

= No Data Reported.
 Represents the arithmetic difference between input and production.
 Note: Refer to Appendix A for Refining District descriptions.
 Sources: Energy Information Administration (EIA) Form EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 34. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels)

Commodify		PAD	District 1 - East C	coast	PAD District 2 - Midwest					
Petroleum Products	Commodity	East Coast		Total		Wisconsin, North and	Kansas,	Total		
Hydrocarbon Gas Liquids	Crude Oil	10,466	653	11,119	9,873	2,345	1,853	14,071		
Hydrocarbon Gas Liquids	Petroleum Products	13.548	1.879	15.427	30.376	7.534	11.697	49.607		
Ethane			,					6,417		
Propose		511	46	557	2,504	586	1,727	4,817		
Normal Butane		-	- 0	-	- 040	-	1 160	0.055		
Indicated   117								2,055 2,021		
Refinery Collins								477		
Ethylene		-	-	-		-		264		
Propylene	•	377	0	377	1,564	31	5	1,600		
Butylene		156	_	156	608	- 31	_ 5	734		
Sobulylene								866		
Öxygenates (excluding Fuel Ethanol)         -	Isobutylene	37	0	37	0	0	0	0		
All Other Oxygenates	Oxygenates (excluding Fuel Ethanol)	62 -	78 —	140	72 –	53 -	34	159 -		
Renewable Fuels (Including Fuel Ethanol)	Methyl Tertiary Butyl Ether (MTBE)	-	_	-	_	_	-	-		
Fuel Ethanol   62   72   134   24   37   30     Renewable Dises Fuel		- 62	- 78	140	41	- 53	- 34	128		
Renewable Diesel Fuel								91		
Other Hydrocarbons		-	6	6	17	16	4	37		
Unfinished Oils		-	-	-	-	-	-	_		
Naphthas and Light ear Ols   929   202   1.131   1.650   153   1.192		4 21Q	300	4 600		- 760	- 4 613	31 13,160		
Kerosene and Light Gas Oils				,			,	2.995		
Residuum			-				711	3,043		
Motor Gasoline Blending Components (MGBC)								4,762		
Reformulated - RBOÉ					,			2,360		
Conventional   3,092			241				2,594	12,930 1,182		
CBOB		,	241		,	-	2.594	11,748		
Other		458	179	637	2,518	1,204	1,587	5,309		
Aviation Gasoline Blending Components		-	_	-	-	-	-			
Finished Motor Gasoline		2,634	62	2,696	4,684	748	1,007	6,439		
Reformulated		_	33	33	1,083	85	295	1,463		
Reformulated Other		_	-	_	_	_	-	-		
Conventional Bended with Fuel Ethanol		-	-	-	-	-	-	-		
Conventional Blended with Fuel Ethanol   Ed55 and Lower   -   -   -   -   -   -   -   -   -		_	- 33	- 33	1 083	- 85	205	1,463		
Greater than Ed55         -		-	-	_	-	-	_	1,400		
Conventional Other		-	-	-	-	-	-	-		
Finished Aviation Gasoline		-	-	-	-	-	_	-		
Kerosene-Type Jet Fuel         479         -         479         1,468         301         233           Kerosene         139         2         141         125         -         10           Distillate Fuel Oil         2,137         181         2,318         3,569         1,080         1,349           15 ppm sulfur and under         1,598         68         1,666         3,394         881         1,261           Greater than 15 ppm to 500 ppm sulfur         29         90         119         -         60         28           Greater than 500 ppm sulfur         510         23         533         175         139         60           Residual Fuel Oil         339         12         351         785         172         51           Less than 0.31 percent sulfur         50         10         60         -         -         -         -           Less than 0.31 percent sulfur         38         2         40         79         34         -           Greater than 1.00 percent sulfur         251         -         251         706         138         51           Petrochemical Feedstocks         105         -         105         581         -         -		-	33	33	1,083		295	1,463 47		
Kerosene         139         2         141         125         —         10           Distillate Fuel Oil         2,137         181         2,318         3,569         1,080         1,349           15 ppm sulfur and under         1,598         68         1,666         3,394         881         1,261           Greater than 15 ppm to 500 ppm sulfur         29         90         119         —         60         28           Greater than 500 ppm sulfur         510         23         533         175         139         60           Residual Fuel Oil         339         12         351         785         172         51           Less than 0.31 percent sulfur         50         10         60         —         —         —         —           0.31 to 1.00 percent sulfur         38         2         40         79         34         —         Greater than 1.00 percent sulfur         251         —         251         706         138         51         —		479	_	479	1.468	• •	233	2,002		
15 ppm sulfur and under     1,598     68     1,666     3,394     881     1,261       Greater than 15 ppm to 500 ppm sulfur     29     90     119     -     60     28       Greater than 500 ppm sulfur     510     23     533     175     139     60       Residual Fuel Oil     339     12     351     785     172     51       Less than 0.31 percent sulfur     50     10     60     -     -     -       0.31 to 1.00 percent sulfur     38     2     40     79     34     -       Greater than 1.00 percent sulfur     251     -     251     706     138     51       Petrochemical Feedstocks     105     -     105     581     -     -       Naphtha for Petro. Feed. Use     105     -     105     438     -     -       Other Oils for Petro. Feed. Use     105     -     105     438     -     -       Special Naphthas     -     -     -     17     17     61     -     -       Lubricants     308     188     496     -     -     248       Waxes     -     476     476     -     -     48       Petroleum Coke     -     -	Kerosene	139		141	125	-	10	135		
Greater than 15 ppm to 500 ppm sulfur     29     90     119     -     60     28       Greater than 500 ppm sulfur     510     23     533     175     139     60       Residual Fuel Oil     339     12     351     785     172     51       Less than 0.31 percent sulfur     50     10     60     -     -     -       Less than 1.00 percent sulfur     38     2     40     79     34     -       Greater than 1.00 percent sulfur     251     -     251     706     138     51       Petrochemical Feedstocks     105     -     105     581     -     -       Naphtha for Petro. Feed. Use     105     -     105     438     -     -       Other Oils for Petro. Feed. Use     -     -     -     143     -     -       Special Naphthas     -     -     -     143     -     -       Special Naphthas     -     -     17     17     61     -     10       Lubricants     308     188     496     -     -     248       Waxes     -     476     476     -     -     48       Petroleum Coke     -     -     -     368     8							,	5,998		
Greater than 500 ppm sulfur         510         23         533         175         139         60           Residual Fuel Oil         339         12         351         785         172         51           Less than 0.31 percent sulfur         50         10         60         -         -         -         -           0.31 to 1.00 percent sulfur         38         2         40         79         34         -           Greater than 1.00 percent sulfur         251         -         251         706         138         51           Petrochemical Feedstocks         105         -         105         581         -         -         -           Naphtha for Petro. Feed. Use         105         -         105         438         -         -         -           Other Oils for Petro. Feed. Use         -         -         -         143         -         -         -           Special Naphthas         -         -         17         17         61         -         10           Lubricants         308         188         496         -         -         248           Waxes         -         476         476         -         -					3,394			5,536 88		
Residual Fuel Oil   339   12   351   785   172   51     Less than 0.31 percent sulfur   50   10   60   -   -   -     0.31 to 1.00 percent sulfur   38   2   40   79   34   -     Greater than 1.00 percent sulfur   251   -   251   706   138   51     Petrochemical Feedstocks   105   -   105   581   -   -     Naphtha for Petro. Feed. Use   105   -   105   438   -   -     Other Oils for Petro. Feed. Use   -   -   143   -   -     Other Oils for Petro. Feed. Use   -   17   17   61   -   10     Lubricants   308   188   496   -   -   248     Waxes   -   476   476   -   -   48     Petroleum Coke   -   -   368   837   53     Marketable   -   -   -   368   837   53     Marketable   -   -   -   -   -     Asphalt and Road Oil   144   202   346   2,051   1,491   421					175			374		
0.31 to 1.00 percent sulfur     38     2     40     79     34     -       Greater than 1.00 percent sulfur     251     -     251     706     138     51       Petrochemical Feedstocks     105     -     105     581     -     -       Naphtha for Petro. Feed. Use     105     -     105     438     -     -       Other Oils for Petro. Feed. Use     -     -     -     143     -     -       Special Naphthas     -     -     -     17     17     61     -     -     -       Special Naphthas     308     188     496     -     -     248       Waxes     -     476     476     -     -     48       Petroleum Coke     -     -     -     368     837     53       Marketable     -     -     -     368     837     53       Catalyst     -     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421	Residual Fuel Oil	339	12	351				1,008		
Greater than 1.00 percent sulfur         251         -         251         706         138         51           Petrochemical Feedstocks         105         -         105         581         -         -           Naphtha for Petro. Feed. Use         105         -         105         438         -         -           Other Oils for Petro. Feed. Use         -         -         17         17         61         -         -           Special Naphthas         -         17         17         61         -         10           Lubricants         308         188         496         -         -         248           Waxes         -         476         476         -         -         48           Petroleum Coke         -         -         -         368         837         53           Marketable         -         -         -         368         837         53           Catalyst         -         -         -         -         -         -           Asphalt and Road Oil         144         202         346         2,051         1,491         421						-	-			
Petrochemical Feedstocks         105         -         105         581         -         -           Naphtha for Petro. Feed. Use         105         -         105         438         -         -           Other Oils for Petro. Feed. Use         -         -         143         -         -           Special Naphthas         -         17         17         61         -         10           Lubricants         308         188         496         -         -         248           Waxes         -         476         476         -         -         48           Petroleum Coke         -         -         -         -         48           Marketable         -         -         -         368         837         53           Catalyst         -         -         -         -         -         -         -           Asphalt and Road Oil         144         202         346         2,051         1,491         421	·		2				_ E1	113 895		
Naphtha for Petro. Feed. Use     105     -     105     438     -     -       Other Oils for Petro. Feed. Use     -     -     -     143     -     -       Special Naphthas     -     17     17     61     -     10       Lubricants     308     188     496     -     -     248       Waxes     -     476     476     -     -     48       Petroleum Coke     -     -     -     368     837     53       Marketable     -     -     -     368     837     53       Catalyst     -     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421			_			138	51	581		
Other Oils for Petro. Feed. Use     -     -     -     143     -     -       Special Naphthas     -     17     17     61     -     10       Lubricants     308     188     496     -     -     248       Waxes     -     476     476     -     -     48       Petroleum Coke     -     -     -     368     837     53       Marketable     -     -     -     368     837     53       Catalyst     -     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421			_			_	_	438		
Lubricants     308     188     496     -     -     248       Waxes     -     476     476     -     -     48       Petroleum Coke     -     -     -     368     837     53       Marketable     -     -     -     368     837     53       Catalyst     -     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421	Other Oils for Petro. Feed. Use	-	-	-		-	-	143		
Waxes     -     476     -     -     48       Petroleum Coke     -     -     -     368     837     53       Marketable     -     -     -     368     837     53       Catalyst     -     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421		200				_		71 248		
Petroleum Coke     -     -     -     368     837     53       Marketable     -     -     -     368     837     53       Catalyst     -     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421		308				_	-	48		
Catalyst     -     -     -     -     -       Asphalt and Road Oil     144     202     346     2,051     1,491     421		-	-	-	368		53	1,258		
Asphalt and Road Oil		-	_	_	368	837	53	1,258		
		1//	202	246	2.051	1 401	421	3,963		
								3,903		
Total Stocks, All Oils								63,678		

Table 34. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2017 (Thousand Barrels) - Continued

			PAD District	3 - Gulf Coast						
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total	
Crude Oil	1,831	25,960	16,123	1,184	361	45,459	2,373	24,394	97,416	
Petroleum Products	10,915	60,247	51,121	3,469	1,462	127,214	9,917	50,270	252,435	
Hydrocarbon Gas Liquids	2,477	2,294	5,191	12	137	10,111	482	1,984	19,928	
Natural Gas Liquids	1,533	2,032	4,594	11	110	8,280	473	1,858	15,985	
Ethane	194	-	_	-	-	194	_	_	194	
Propane  Normal Butane	432 577	548 1,214	284 2,985	2 5	4 76	1,270 4,857	68 293	111 1,165	3,658 8,608	
Isobutane	264	232	993	4	15	1,508	100	578	2,794	
Natural Gasoline	66	38	332	-	15	451	12	4	731	
Refinery Olefins	944	262	597	1	27	1,831	9	126	3,943	
Ethylene	0	_		-	_	0	_	_	C	
Propylene	859	55	508	1 0	0	1,423	1 8	21	2,335	
Butylene	85 0	207 0	89 0	0	27 0	408 0	0	105 0	1,571 37	
Oxygenates/Renewable Fuels/Other Hydrocarbons	37	63	236	61	13	410	96	163	968	
Oxygenates (excluding Fuel Ethanol)	_	-		-	-	_	_	_	-	
Methyl Tertiary Butyl Ether (MTBE)	-	_	-	-	-	-	-	-	-	
All Other Oxygenates <sup>1</sup>	_	_	_	_	_	_	_	_	-	
Renewable Fuels (including Fuel Ethanol)	37 31	63 43	236 77	61 25	13 10	410 186	96 92	163 31	937 534	
Renewable Diesel Fuel	6	20	159	36	3	224	92	132	403	
Other Renewable Fuels	_	_	-	-	_		_	-	-	
Other Hydrocarbons	-	_	-	_	_	_	-	-	31	
Unfinished Oils	3,295	22,174	15,255	862	497	42,083	2,955	19,550	82,357	
Naphthas and Lighter	1,311	6,772	2,539	210	168	11,000	622	3,332	19,080	
Kerosene and Light Gas Oils  Heavy Gas Oils	873 520	4,017 9,222	2,310 8,063	211 351	157 172	7,568 18,328	640 1,140	4,006 9,717	15,877 36,071	
Residuum	591	2,163	2,343	90	- 172	5,187	553	2,495	11,329	
Motor Gasoline Blending Components (MGBC)	2,614	11,798	12,699	325	435	27,871	2,950	13,848	62,555	
Reformulated - RBOB	151	1,504	551	_	_	2,206	_	5,171	10,182	
Conventional	2,463	10,294	12,148	325	435	25,665	2,950	8,677	52,373	
CBOB	1,132	3,368	5,616	237	13	10,366	1,405	2,278	19,995	
GTAB Other	1,331	6,926	6,532	88	422	15,299	1,545	6,399	32,378	
Aviation Gasoline Blending Components	3	- 0,320	7	-	-	10,233	- 1,040	- 0,000	10	
Finished Motor Gasoline	511	1,856	1,866	18	88	4,339	669	833	7,337	
Reformulated	-	-	-	-	-	-	-	16	16	
Reformulated Blended with Fuel Ethanol	-	-	-	-	-	-	-	16	16	
Reformulated Other Conventional	511	- 1,856	1,866	- 18	- 88	4,339	669	817	7,321	
Conventional Blended with Fuel Ethanol	511	1,000	1,000	10	-	4,339	53	017	53	
Ed55 and Lower	_	_	_	-	_	_	53	-	53	
Greater than Ed55	-	_	-	-	_	-	-	-	-	
Conventional Other	511	1,856	1,866	18	88	4,339	616	817	7,268	
Finished Aviation Gasoline	24	111	172	-	_	307	8	188	550	
KeroseneKerosene	278 38	3,446 6	2,663 60	45 6	_	6,432 110	276	3,666	12,855 388	
Distillate Fuel Oil	969	7,832	6,659	331	135	15,926	1,420	4,972	30,634	
15 ppm sulfur and under	926	7,051	4,944	228	135	13,284	1,198	4,200	25,884	
Greater than 15 ppm to 500 ppm sulfur	43	134	869	32	_	1,078	138	259	1,682	
Greater than 500 ppm sulfur	-	647	846	71	_	1,564	84	513	3,068	
Residual Fuel Oil	129	2,581	1,271	51	38	4,070	202	2,567	8,198	
Less than 0.31 percent sulfur	19	188	179 77	- 51	- 5	198 321	8 9	330	266 813	
Greater than 1.00 percent sulfur	110	2,393	1,015	-	33	3,551	185	2,237	7,119	
Petrochemical Feedstocks	145	1,581	593	3	_	2,322	_	2	3,010	
Naphtha for Petro. Feed. Use	29	1,004	445	3	_	1,481	_	2	2,026	
Other Oils for Petro. Feed. Use	116	577	148	_	_	841	_	_	984	
Special Naphthas Lubricants	83 31	581 2,015	1,928	86 704	-	750 4,678	_	59 532	897 5,954	
Waxes	31	2,015 65	92	46	_	203	_	- 532	5,954 727	
Petroleum Coke	38	3,318	1,736	-0	_	5,092	96	1,350	7,796	
Marketable	38	3,318	1,736	_	_	5,092	96	1,350	7,796	
Catalyst	_	_	_	_	_	_	_	_	-	
Asphalt and Road Oil	214	267	594	919	98	2,092	747	457	7,605	
Miscellaneous Products	29	259	99	-	21	408	15	98	666	

<sup>=</sup> No Data Reported.

1 Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 35. Percent Yield of Petroleum Products by PAD and Refining Districts, October 2017

	PAD	District 1 - East C	oast	PAD District 2 - Midwest					
Commodity	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total		
Hydrocarbon Gas Liquids	1.6	-0.6	1.4	3.3	-0.1	1.3	2.3		
Finished Motor Gasoline <sup>1</sup>	50.3	39.1	49.4	54.1	50.4	49.3	52.6		
Finished Aviation Gasoline <sup>2</sup>	-	-	-	_	0.1	-	0.0		
Kerosene-Type Jet Fuel	9.1	_	8.4	9.3	4.6	2.9	7.3		
Kerosene	0.0	_	0.0	0.2	-	0.0	0.1		
Distillate Fuel Oil <sup>3</sup>	30.2	25.9	29.9	24.0	34.0	40.2	28.8		
Residual Fuel Oil	3.7	0.1	3.4	1.7	1.3	0.4	1.4		
Naphtha for Petro. Feed. Use	0.4	_	0.4	1.0	-	-	0.6		
Other Oils for Petro. Feed. Use	-	_	_	0.3	-	_	0.2		
Special Naphthas	-	0.8	0.1	0.1	-	-	0.0		
Lubricants	0.7	6.7	1.1	_	-	0.5	0.1		
Waxes	-	-0.3	0.0	-	-	0.1	0.0		
Petroleum Coke	3.4	0.7	3.2	5.2	5.3	4.2	5.0		
Asphalt and Road Oil	1.7	24.2	3.4	3.5	7.6	1.5	3.7		
Still Gas	3.4	2.1	3.3	3.7	3.7	3.9	3.7		
Miscellaneous Products	0.2	1.2	0.3	0.4	0.7	0.3	0.4		
Processing Gain(-) or Loss(+) <sup>4</sup>	-4.6	0.2	-4.3	-6.7	-7.6	-4.4	-6.4		

			PAD District	3 - Gulf Coast					
Commodity	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total	PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
Hydrocarbon Gas Liquids	2.0	3.8	4.8	0.4	0.4	3.9	1.7	2.3	3.1
Finished Motor Gasoline <sup>1</sup>		43.5	42.9	29.4	52.4	43.8	49.5	49.2	47.0
Finished Aviation Gasoline <sup>2</sup>	0.4	0.1	0.1		-	0.1	0.0	0.1	0.1
Kerosene-Type Jet Fuel	7.0	8.8	10.6	3.5	_	9.1	5.5	16.2	9.6
Kerosene	0.1	0.0	0.0	0.3	_	0.0	-	0.0	0.0
Distillate Fuel Oil <sup>3</sup>	29.4	31.6	31.1	34.1	42.8	31.5	32.5	21.7	29.4
Residual Fuel Oil	1.8	1.8	3.7	-1.2	4.1	2.5	1.7	5.3	2.7
Naphtha for Petro. Feed. Use	0.5	2.4	1.1	-	_	1.7	-	0.0	1.1
Other Oils for Petro. Feed. Use	0.0	1.4	1.1	_	_	1.1	_	_	0.6
Special Naphthas	0.5	0.6	_	3.3	_	0.4	_	0.0	0.3
Lubricants	0.0	1.3	1.6	12.4	_	1.6	_	0.9	1.1
Waxes	_	0.0	0.0	0.2	_	0.0	_	-	0.0
Petroleum Coke	2.1	6.3	5.3	2.3	0.9	5.4	4.1	5.5	5.1
Asphalt and Road Oil	1.3	0.3	1.0	10.8	-0.4	0.9	5.8	1.1	1.9
Still Gas	4.1	4.2	3.7	2.2	1.9	3.9	3.6	4.8	3.9
Miscellaneous Products	0.6	0.7	0.5	0.0	0.0	0.6	0.7	0.6	0.6
Processing Gain(-) or Loss(+) <sup>4</sup>	-4.0	-6.9	-7.2	1.9	-2.4	-6.5	-5.1	-7.6	-6.5

Note: Percent yield is calculated as net production (or adjusted net production) divided by input of crude oil, hydrogen, "other" hydrocarbons, and net input of unfinished oils.

Source: Calculated from data on Tables 30 and 31.

<sup>=</sup> No Data Reported.

1 Based on net production of finished motor gasoline minus input of natural gas plant liquids, fuel ethanol, oxygenates, and net input of motor gasoline blending components.

2 Data Reported.

Based on finished aviation gasoline net production minus net input of aviation gasoline blending components.

Based on distillate fuel oil net production minus input of biodiesel, "other" renewable diesel fuels, and "other" renewable fuels.

<sup>&</sup>lt;sup>4</sup> Represents the arithmetic difference between input and production.

Note: Totals may not equal sum of components due to independent rounding.

Note: Refer to Appendix A for Refining District descriptions.

Table 36. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, October 2017 (Thousand Barrels)

		Residual Fuel Oil	
PAD District and State of Entry	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
PAD District 1	653	1,783	2,430
Connecticut	-	1,700	2,40
Delaware		_	
Florida	_	322	32
Georgia	_	207	20
	_	207	20
Maine	-	_	
Maryland	-	-	
Massachusetts	-	_	
New Hampshire	-	- 070	1.00
New Jersey	653	978	1,63
New York		50	5
North Carolina	-		
Pennsylvania	-	124	12
Rhode Island	-	-	
South Carolina	-	101	10
Vermont	-	1	
Virginia	-	-	
West Virginia	-	-	-
PAD District 2	60	-	60
Illnois	-	-	-
Indiana	-	-	
Michigan	4	-	
Minnesota	56	-	5
North Dakota	-	-	
Ohio	_	_	
Wisconsin	-	_	
DAD DIVISIO		4 070	4.07
PAD District 3	-	1,378	1,37
Alabama	-		
Louisiana	-	572	57
Mississippi	-	-	
New Mexico	-	-	
Texas	-	806	80
PAD District 4	_	-	
ldaho	-	-	
Montana	-	_	
PAD District 5	106	694	80
Alaska	-	-	
California	_	694	69
Hawaii	_	-	
Oregon		_	
Washington	106		10
	.00		
U.S. Total	819	3,855	4,67

= No Data Reported.
Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 37. Imports of Crude Oil and Petroleum Products by PAD District, October 2017

(Thousand Barrels, Except Where Noted)

Commodity			PAD Districts			U.S.	Total
	1	2	3	4	5	Total	Daily Average
Crude Oil <sup>1,2</sup>	33,459	68,179	86,614	8,398	39,296	235,946	7,611
Hydrocarbon Gas Liquids	1,264	2,374	183	365	1,283	5,469	176
Natural Gas Liquids		2,025	-	365	1,283	4,692	151
Ethane		-	-	-	-	0.574	_
Propane Normal Butane		1,477 321	_	355 8	891 374	3,574 826	115 27
Isobutane		225	_	2	18	290	9
Natural Gasoline		2	_		-	230	0
Refinery Olefins		349	183	_	_	777	25
Ethylene		_	_	_	-	-	_
Propylene	245	211	-	-	-	456	15
Butylene	-	138	183	_	-	321	10
Isobutylene		_	-	-	_	-	_
Other Liquids		455	14,676	19	6,521	36,159	1,166
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons		86	219	/	581	1,100	35
Hydrogen Oxygenates (excluding Fuel Ethanol)	_	_	211	_	_	211	7
Methyl Tertiary Butyl Ether (MTBE)	_	_	87	_	_	87	3
Other Oxygenates <sup>3</sup>		_	124	_	_	124	4
Renewable Fuels (including Fuel Ethanol)	207	47	-	7	581	842	27
Fuel Ethanol		-	_	_	-	69	2
Biomass-Based Diesel Fuel		47	-	7	194	386	12
Other Renewable Diesel Fuel		-	-	-	387	387	12
Other Renewable Fuels		-	_	_	_	_	_
Other Hydrocarbons		39	8	-		47	2
Unfinished Oils <sup>1</sup>		_	14,105	_	5,437	20,724	669
Naphthas and Lighter Kerosene and Lighter Gas Oils	372	_	315 230	-	_	687	22 7
Heavy Gas Oils		_	10,308	_	4,883	230 16,001	516
Residuum			3,252	_	554	3,806	123
Motor Gasoline Blend.Comp. (MGBC)		369	352	12	503	14,335	462
Reformulated - RBOB		_	_	- '-	-	4,978	161
Conventional		369	352	12	503	9,357	302
CBOB	616	-	_	_	403	1,019	33
GTAB	2,135	-	-	-	-	2,135	69
Other		369	352	12	100	6,203	200
Aviation Gasoline Blend. Comp.		-	_	_	_	-	_
Finished Petroleum Products	11,104	848	4,985	127	4,859	21,923	707
Finished Motor Gasoline		-	465	-	36	1,020	33
ReformulatedReformulated Blended with Fuel Ethanol		-	_	_	_	_	_
Reformulated Other		_	_	_	_	_	_
Conventional		_	465	_	36	1,020	33
Conventional Blended with Fuel Ethanol		_	_	_	_	- 1,020	_
Ed55 and Lower		_	_	_	_	-	_
Greater than Ed55	-	-	-	-	-	-	_
Conventional Other		-	465	-	36	1,020	33
Finished Aviation Gasoline		2	_	1	4	8	0
Kerosene-Type Jet Fuel		-	-	50	3,476	7,145	230
Bonded Aircraft Fuel		-	-	_	487	713	23
Other		_	_	50	2,989	6,432	207
Kerosene	315 3,462	71	207	46	353	315 4,139	10 134
15 ppm sulfur and under	2,983	43	207	46	352	3,424	110
Bonded	,	-	_	-	-	-	-
Other		43	-	46	352	3,424	110
Greater than 15 ppm to 500 ppm sulfur	42	_	_	-	-	42	1
Bonded	_	_	_	-	_	-	_
Other	42	-	-	-	-	42	1
Greater than 500 ppm to 2000 ppm sulfur	340	-	207	-	1	548	18
Bonded		-		-	-		_
Other	340	_	207	_	1	548	18
Greater than 2000 ppm	97	28	_	-	_	125	4
Bonded Other	97	28	_	_	_	125	4
Residual Fuel Oil	2,436	60	1,378	_	800	4,674	151
Less than 0.31 percent sulfur	2,430	_	1,070	_	-	7,074	-
0.31 to 1.00 percent sulfur	653	60	-	-	106	819	26
Greater than 1.00 percent sulfur		_	1,378	_	694	3,855	124
Petrochemical Feedstocks		168	1,265	_	38	1,471	47
Naphtha for Petro. Feed. Use		82	1,219	-	38	1,339	43
Other Oils for Petro. Feed. Use		86	46	-	_	132	4
Special Naphthas		51	458	_	_	509	16
Lubricants		199	706	_	27	1,087	35
Waxes Petroleum Coke (Marketable)	77	6 19	37 469	_	39 31	159 522	5 17
Asphalt and Road Oil	517	271	409	29	54	871	28
	317	1		1	1	3	0
Miscellaneous Products							

<sup>=</sup> No Data Reported.

<sup>=</sup> No Data Reported.

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

2 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

3 Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 38. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January-October 2017 (Thousand Barrels)

O			PAD Districts			U.S.	Total
Commodity	1	2	3	4	5	Total	Daily Average
Crude Oil <sup>1,2</sup>	286,841	718,124	955,762	83,524	373,588	2,417,839	7,953
Hydrocarbon Gas Liquids		24,260	3,994	3,189	10,160	55,716	183
Natural Gas Liquids		20,008	2,733	3,189	10,160	46,876	154
Ethane Propane		- 16.158	_ 14	2,898	- 8,380	- 37,134	122
Normal Butane	516	1,768	-	93	1,670	4,047	13
Isobutane		2,040	30	198	110	2,964	10
Natural Gasoline		42	2,689	_	-	2,731	9
Refinery Olefins		4,252	1,261	-	-	8,840	29
Ethylene		- 0.400	_	-	_	- 000	_
Propylene Butylene	3,320	3,486 766	- 1,261	_	_	6,806 2,034	22
Isobutylene	7	700	1,201	_	_	2,034	_
Other Liquids		3,327	151,011	389	52.317	398,933	1,312
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	5,804	480	5,017	44	6,129	17,474	57
Hydrogen		-	-	-	-	-	-
Oxygenates (excluding Fuel Ethanol)		-	3,203	-	_	3,203	11
Methyl Tertiary Butyl Ether (MTBE) Other Oxygenates <sup>3</sup>		_	1,873 1,330	-	_	1,873 1,330	6
Renewable Fuels (including Fuel Ethanol)		370	1,716	44	6,129	14,061	46
Fuel Ethanol		-	-	-	1,228		4
Biomass-Based Diesel Fuel		370	1,716	44	816	8,648	28
Other Renewable Diesel Fuel	_	-	_	-	4,085	4,085	13
Other Renewable Fuels	_	_	_	_	_	_	_
Other Hydrocarbons Unfinished Oils <sup>1</sup>		110	98	-	- 06.057	210	1
Unfinished Oils¹		_	132,381 2,750	_	36,357 1,044	188,172 7,913	619 26
Kerosene and Lighter Gas Oils		_	1,025	_	1,044	1,025	3
Heavy Gas Oils	10,499	_	96,568	_	30,527	137,594	453
Residuum		-	32,038	_	4,786	41,640	137
Motor Gasoline Blend.Comp. (MGBC)		2,847	13,613	345	9,831	193,287	636
Reformulated - RBOB		258	-	_	268	65,982	217
Conventional	101,195	2,589	13,613	345	9,563	127,305	419
CBOBGTAB	8,726 28,522	253	983	_	4,377 161	13,356 29,666	98
Other	63,947	2,336	12,630	345	5,025	84,283	277
Aviation Gasoline Blend. Comp.		-	-	-	-		
Finished Petroleum Products	94,929	7,552	50,322	1,031	49,571	203,405	669
Finished Motor Gasoline	8,073	_	1,187	_	1,152	10,412	34
Reformulated	_	_	-	_	_	-	-
Reformulated Blended with Fuel Ethanol	_	-	-	-	-	-	_
Reformulated Other  Conventional	8.073	_	- 1.187	_	1.152	10.412	34
Conventional Blended with Fuel Ethanol		_	1,107	_	1,152	10,412	_
Ed55 and Lower		_	-	_	_	-	_
Greater than Ed55		-	-	_	_	-	-
Conventional Other		-	1,187	-	1,152	10,412	34
Finished Aviation Gasoline		23	-	9	20	96	0
Kerosene-Type Jet Fuel Bonded Aircraft Fuel		5	-	156	29,083 8,777	48,322 11,259	159 37
Other		_ 5	_	156	20,306	37,063	122
Kerosene	,	-	_	-	55	1,167	4
Distillate Fuel Oil		325	2,903	438	3,887	40,065	132
15 ppm sulfur and under		274	_	438	3,789	27,187	89
Bonded		-	-	-	-	-	-
Other		274	_	438	3,789	27,187	89
Greater than 15 ppm to 500 ppm sulfur		-	_	-	-	386	1
Bonded Other		_	_	_	_	386	1
Greater than 500 ppm to 2000 ppm sulfur		12	2,039	-	98	11,409	38
Bonded	-	-	_,500	_	_		_
Other		12	2,039	_	98	11,409	38
Greater than 2000 ppm	180	39	864	-	-	1,083	4
Bonded	_	_	_	_	_	_	_
OtherResidual Fuel Oil	180 22.791	39 697	864 20 117	-	- 12,898	1,083 56,503	4 186
Less than 0.31 percent sulfur	, -	697	20,117 2,334	_	12,898	3,543	186
0.31 to 1.00 percent sulfur		354	1,423	-	1,157	6,386	21
Greater than 1.00 percent sulfur		343	16,360	_	11,741	46,574	153
Petrochemical Feedstocks	9	1,480	12,120	_	343	13,952	46
Naphtha for Petro. Feed. Use		759	8,775	-	311	9,854	32
Other Oils for Petro. Feed. Use		721	3,345	_	32	4,098	13
Special Naphthas		444	3,840	-	45	4,329	14
Lubricants		1,951 58	7,671 298	_	523 333	12,360 1,431	41
Petroleum Coke (Marketable)		225	2,166	-	285	2,892	10
Asphalt and Road Oil		2,340		417	945		39
Miscellaneous Products	_	4	20	11	2	37	0
Total	587,772	753,263	1,161,089	88,133	485,636	3,075,893	10,118

<sup>=</sup> No Data Reported.

<sup>- =</sup> No Data Reported.

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

2 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

3 Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	ine Blending C	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	89,656	_	_	4,824	_	_	_	_	1,592	1,592
Algeria	-	_	_	4,452	_	_	_	_	-	1,002
Angola	3,836	_	_	-,402	_	_	_	_	_	_
Ecuador	5,065	_	_	_	_	_	_	_	_	_
Equatorial Guinea	1,044	_	_	_	_	_	_	_	-	_
Gabon	629	_	_	_	_	_	_	_	_	_
Iran	-	_	_	_	_	_	_	_	_	_
Iraq	21,956	_	-	_	_	_	_	_	_	-
Kuwait	3,505	_	_	_	_	_	_	_	_	_
Libya	5,447	_	_	_	_	_	_	_	_	_
Nigeria	13,344	_	_	_	_	_	_	_	322	322
Qatar	10,044	_	_	_	_	_	_	_	-	-
Saudi Arabia	17,442	_	_	_	_	_	_	_	_	_
United Arab Emirates	1,565			372	_	_	_	_	_	
Venezuela	15,823			312	_	_	_	_	1,270	1,270
v 61162u61a	10,023	-	_	-	_	_	-	-	1,270	1,270
Non-OPEC	146,290	4,692	777	15,900	_	1,020	1,020	4,978	7,765	12,743
Argentina	_	, -	_	_	_	_	, –	_	_	_
Aruba	-	-	_	-	_	_	-	_	-	_
Australia	_	_	_	_	_	_	_	_	_	_
Bahamas	-	-	_	-	_	_	-	_	-	_
Bahrain	_	_	_	_	_	_	_	_	_	_
Belgium	_	_	_	1,933	_	_	_	_	-	_
Brazil	6,707	_	_	-,,,,,	_	_	_	_	16	16
Brunei	-	_	_	_	_	_	_	_	-	-
Cameroon	_	_	_	_	_	_	_	_	_	_
Canada	102,720	4,636	594	451	_	309	309	3,575	1,796	5,371
Chad	1,066	1,000	-	-	_	_	_	0,070	1,700	- 0,071
China	1,000	_	_	_	_	_	_	_	_	_
Colombia	7,676	_	_	266	_	_	_	_	217	217
Congo (Brazzaville)	7,070		_	200	_	_	_	_	217	217
Denmark	600	_		360	_	_	_	_	_	_
	447	_	_	300	_	_	_	_	_	_
Egypt	447	_		_	_	_	_	_	_	_
Estonia	_	_	_	98	_	293	293	_	183	183
Finland	_	_		143	_	293	293	_	1,007	1,007
France	_	_	_	140	_	91	91	_	91	,
Germany	239	_	_	_	_	91	91	-	91	91
Guatemala	239	_	_		_	_	_	_	-	- 501
India	- 4 000	-		10	_	_	-	-	591	591
Indonesia	1,333	-	_	-	-	_	_	-	-	-
Italy	-	-	_	180	_	_	-	-	902	902
Korea, South	-	-	-	-	_	_	_	-	-	-
Latvia	-	-	_	_	_	_	-	-	-	_
Lithuania	_	-	_	-	_	-	-	-	-	-
Malaysia	- 40 40-	-	_	410	_	_	_	-	53	53
Mexico	19,105	-	32		_	-	-	_	25	25
Netherlands	-	-	_	1,158	_	39	39	-	341	341
Netherlands Antilles	-	-	_	_	_	-	-	_	-	_
Norway	1,536	-	_	359	_	_	_	-	305	305
Oman	1,920	-	_	-	_	-	_	-	-	_
Portugal		-	_	124	_	_	_	-	280	280
Russia	556	-	_	7,833	_	22	22	-	1,007	1,007
Spain	-	-	_	517	_	_	_	-	270	270
Sweden	-	-	_	53	_	-	_	-	-	_
Syria	_	-	_	-	_	_	_	-	-	
Trinidad and Tobago	_	56	_	_	_	-	_	_	_	-
United Kingdom	708	-	_	67	_	266	266	1,403	76	1,479
Vietnam	_	-	-	-	-	-	-	-	_	-
Virgin Islands, U.S	-	-	_	_	_	_	_	-	-	_
Yemen	_	-	_	-	_	-	-	_	_	_
Other	1,677	0	151	1,938	-	0	0	0	605	605
Total	235,946	4,692	777	20,724	_	1,020	1,020	4,978	9,357	14,335
Paraisa Outs	44 400									
Persian Gulf <sup>3</sup>	44,468	-	_	372	_	_	_	_	-	

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2017 (Thousand Barrels) — Continued

Country of Origin  OPEC  Algeria	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other	15 ppm	Greater than 15 ppm to		Greater	
Algeria	- - - - -	- - -	-		Diesei	Renewable Fuels	sulfur and under	500 ppm sulfur	501 to 2000 ppm	than 2000 ppm	Total
Algeria	- - - - -	- - -	_								
Angola Ecuador Equatorial Guinea Gabon Iran Iraq Kuwait Libya Nigeria	- - - -	_ _ _		-		-	-	-	-	_	
Ecuador	- - -	_	_	_	_	_	_	_	_	_	_
Equatorial Guinea	-		_	_	_	_	_	_	_	_	_
Iran Iraq Iraq Iraq Iraq Iraq Iraq Iraq Iraq	-	-	-	-	-	-	-	-	-	-	_
Iraq Kuwait Libya Nigeria		-	_	-	_	_	-	-	-	_	_
Kuwait Libya Nigeria	-	-	-	-	-	-	-	-	-	-	_
Libya Nigeria	-	-	-	-	-	-	-	-	-	-	_
Nigeria	-	-	-	-	_	_	-	_	-	_	_
	_	_	_	_		_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	_
United Arab Emirates	-	_	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	87	124	69	386	387	_	3,424	42	548	125	4,139
Argentina	-	-	-	-	_	-	-	-	-	-	_
Aruba Australia	-	-	_	_		_	_	_	_	_	
Bahamas	_	_	_	_	_	_	_	_	_	_	_
Bahrain	_	_	_	_	_	_	_	_	_	_	_
Belgium	-	_	_	-	_	_	-	-	-	_	_
Brazil	87	124	69	-	-	-	-	-	-	-	_
Brunei	-	-	_	_	-	_	_	_	_	_	_
Cameroon	-	-	_	-	_	_	-	-	-	-	-
Canada	-	-	_	307	_	_	3,424	42	341	125	3,932
Chad	_	_	_	_		_	_	_	_	_	_
Colombia	_	_	_	_	_	_	_	_	_	_	_
Congo (Brazzaville)	-	_	_	-	_	_	-	-	-	_	_
Denmark	-	-	_	-	-	_	-	_	-	_	_
Egypt	-	-	_	-	_	_	-	_	_	-	_
Estonia	-	-	-	-	-	-	-	-	-	-	_
Finland	_		_	_		_	_	_	_	_	
Germany	_	_	_	50	_	_	_	_	_	_	_
Guatemala	-	-	-	-	_	-	-	-	_	_	_
India	-	-	_	-	-	_	-	_	-	-	_
Indonesia	-	-	_	_	-	_	_	-	-	-	_
Italy	-	-	-	-	_	-	-	-	-	-	_
Korea, South	-	-	-	-	_	-	-	-	-	-	_
LatviaLithuania	-	_	_	_		_	_	_	_	_	
Malaysia	_	_	_	_	_	_	_	_	_	_	_
Mexico	-	_	_	_	_	_	_	_	_	_	_
Netherlands	-	_	_	_	-	_	_	_	_	_	-
Netherlands Antilles	-	-	_	_	-	_	_	_	_	_	-
Norway	-	-	_	_		_	_	_	_	_	_
Oman Portugal	_		_	_	_	_	_	_	_	_	<u> </u>
Russia	_	_	_	_	_	_	_	_	207	_	207
Spain	-	-	-	-	_	-	-	-		-	
Sweden	-	_	-	_	-	-	_	-	_	_	-
Syria	-	_	_	_	_	_	_	_	_	_	_
Trinidad and Tobago	-	-	_	_	_	_	_	_	_	-	-
United Kingdom	-	_	_	_		_	_	_	_	_	_
Vietnam Virgin Islands, U.S	_	_	_	_		_	_	_	_	_	_
Yemen	_	_	_	_	_	_	_	_	_	_	_
Other	0	0	0	29	387	-	0	0	0	0	0
Total	87	124	69	386	387	-	3,424	42	548	125	4,139
Persian Gulf <sup>3</sup>			_		_	_					_

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2017 (Thousand Barrels) — Continued

							Residual	Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	_	_	_	787	_	_	_	_	
Algeria	_	_	_	707		_		_	
Angola	_	_	_	_	_	_	_	_	
Ecuador	-	_	_	-	-	_	_	_	
Equatorial Guinea	-	-	-	-	-	_	-	-	
Gabon	-	-	-	-	-	-	-	_	
Iran	-	-	_	-	_	-	-	_	
Iraq	-	-	-	-	-	-	-	-	
Kuwait	-	_	-	181	_	-	_	_	
Libya	-	-	-	-	-	-	-	-	
Nigeria	-	-	-	-	_	-	_	-	
Qatar	-	-	-	-	-	-	-	-	
Saudi Arabia	-	_	_	280	_	-	_	_	
United Arab Emirates	_	_	_	206	-	-	_	_	
Venezuela	-	_	-	326	_	-	_	-	
Non-OPEC	315	8	_	6,358	509	<u>_</u>	819	3,855	4,67
Argentina	313	0	_	0,336	509	_	261	3,035	4,672 26
Aruba	_	_	_	_	_	_	201	_	20
Australia	_	_	_	_	_	_	_	_	
Bahamas	-	_	_	-	-	_	_	_	
Bahrain	_	_	_	_	-	_	_	_	
Belgium	-	-	-	-	17	-	-	_	
Brazil	-	-	_	-	-	-	-	_	
Brunei	-	-	_	-	-	_	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-
Canada	_	8	_	657	136	-	166	679	84
Chad	-	-	-	-	-	-	-	_	
China	-	-	-	492	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	_	
Congo (Brazzaville)	-	-	_	-	_	-	_	-	-
Denmark	-	-	-	-	-	-	-	-	
Egypt	-	_	-	50	_	-	_	-	
Estonia	_	-	_	_	_	_	_	-	
FinlandFrance	_		_	_	_	_		_	
Germany	_	_	_	_	21	_			
Guatemala	_	_	_	_	-	_		_	
India	_	_	_	721	_	_	_	_	
Indonesia	_	_	_	-	_	_	_	_	
Italy	_	_	_	_	37	_	_	_	
Korea, South	-	_	_	3,257	97	_	_	_	-
Latvia	-	-	-		-	_	_	-	
Lithuania	_	_	_	_	_	_	_	_	
Malaysia	-	_	-	344	-	_	_	_	
Mexico	-	-	-	-	-	-	-	806	80
Netherlands	_	_	_	_	51	_	_	_	
Netherlands Antilles	-	-	-	-	-	-	-	-	
Norway	-	_	_	-	_	_	_	_	
Oman	-	-	-	-	-	-	-	_	
Portugal	-	_	-	- 070	_	-	_	- 1.000	4.00
Russia Spain	-	_	_	276	_	-	_	1,033	1,03
Sweden	-	_	_	_		-		_	
Syria	_	_	_	_	_	_			
Trinidad and Tobago	_		_					991	99
United Kingdom	_	_	_	_	_	_	_	-	
Vietnam	_	_	_	_	_	_	_	_	
Virgin Islands, U.S	-	_	-	-	-	_	_	_	
Yemen	_	_	_	_	_	_	_	_	
Other	315	0	-	561	150	_	392	346	73
Total	315	8	-	7,145	509	-	819	3,855	4,67
			l l			1		ı	
Persian Gulf <sup>3</sup>	l			461					

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2017 (Thousand Barrels) - Continued

	Petroch Feeds	nemical stocks							•		Daily Average	•
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
OPEC	_	_	_	_	_	321	_	7,524	97,180	2,892	243	3,135
Algeria	_	-	_	-	_	-	_	4,452	4,452	-	144	144
Angola	_	_	_	_	_	_	_	_	3,836	124	-	124
Ecuador	_	-	_	_	_	_	_	_	5,065	163	-	163
Equatorial Guinea	-	-	-	_	_	_	-	-	1,044	34	-	34
Gabon	_	_	_	_	_	_	_	_	629	20	-	20
IranIraq	_	_	_	_	_	_	_	_	21,956	708	-	708
Kuwait	_	_	_	_	_	_	_	181	3,686	113	6	119
Libya	_	_	_	_	_	_	_	-	5,447	176	_	176
Nigeria	_	_	-	_	_	_	_	322	13,666	430	10	441
Qatar	-	-	_	_	-	275	_	275	275	-	9	9
Saudi Arabia	_	_	_	-	_	_	_	280	17,722	563	9	572
United Arab Emirates	-	_	_	_	_	46	_	418	1,983	50	13	64
Venezuela	_	_	_	-	_	_	_	1,596	17,419	510	51	562
Non-OPEC	1,339	132	159	522	871	766	3	56,027	202,317	4,719	1,807	6,526
Argentina	-	23	-	90	-	1	_	375	375	-,,,,,,	12	12
Aruba	_	_	-	_	-	_	_	_	-	-	-	_
Australia	-	-	_	_	-	-	_	-	-	-	-	-
Bahamas	-	-	-	_	_	_	_	-	-	-	-	_
Bahrain	_	_	_	_	_	_	_	-	-	-	-	_
Belgium	2	_	-	-	_	6	_	1,958	1,958	-	63	63
Brazil	_	_	_	145	_	_	_	441	7,148	216	14	231
Cameroon	_	_	_	_	_	_	_	_	_		_	
Canada	82	86	45	50	826	294	3	18,671	121,391	3,314	602	3,916
Chad	-	-	-	_	-		_	-	1,066	34	-	34
China	-	_	52	114	-	_	_	658	658	_	21	21
Colombia	427	-	-	-	-	-	_	910	8,586	248	29	277
Congo (Brazzaville)	_	_	_	-	_	_	_	-	-	_	_	
Denmark	-	_	_	-	_	_	_	360	960	19	12	31
Egypt	_	_	-	_	_	_	_	50	497	14	2	16 -
EstoniaFinland	_	_	_	_	_	61	_	635	635	_	20	20
France	_	23	_	_	_	28	_	1,201	1,201	_	39	39
Germany	14		_	_	_	18	_	285	285	_	9	9
Guatemala	_	-	_	_	_	_	_	_	239	8	-	8
India	_	-	_	_	_	_	_	1,322	1,322	-	43	43
Indonesia	_	-	_	-	_	53	_	53	1,386	43	2	45
Italy	14	-	_	_	_	4	-	1,138	1,138	_	37	37
Korea, South	_	_	1	-	_	282	_	3,637	3,637	_	117	117
Latvia Lithuania	_	_	_	_	_	_	_	_	_	_	_	
Malaysia	_	_	23	_	_	_	_	830	830	_	27	27
Mexico	295	_		_	-	_	-	1,158	20,263	616	37	654
Netherlands	-	-	-	-	-	_	-	1,589	1,589	_	51	51
Netherlands Antilles	-	-	-	-	-	-	-	-	_	-	_	
Norway	_	_	_	_	_	_	-	664	2,200	50	21	71
Oman	-	_	_	_	_	-	_	404	1,920 404	62	- 13	62 13
Portugal	62	_	_	_	_	4	_	10,444	11,000	18	337	355
Spain	-	_	_	_	45	-	_	832	832	-	27	27
Sweden	_	_	-	-	-	-	_	53	53	_	2	2
Syria	-	-	-	-	-	-	-	_	_	-	_	-
Trinidad and Tobago	-	-	-	-	-	-	-	1,047	1,047	-	34	34
United Kingdom	23	-	-	8	-	15	-	1,858	2,566	23	60	83
Vietnam	-	-	-	-	-	-	_	_	-	_	_	-
Virgin Islands, U.S	_	_	_	_	_	_	_	_	-	_	-	_
YemenOther	420	_ 0	38	115	0	0	- 0	5,454	7,131	- 54	176	228
Total	1,339	132	159	522	871	1,087	3	63,551	299,497	7,611	2,050	9,661
Persian Gulf <sup>3</sup>	1,559	102	139	322	0,1							•
reisian Gun	_	_	_	_	_	321	_	1,154	45,622	1,434	37	1,472

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Note: Totals may not equal sum of components due to independent rounding.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	ine Blending Co	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	970,168	199	_	46,202	_	56	56	_	12,283	12,283
Algeria	22,987	-	-	36,576	_	_	-	-	-	_
Angola	39,791	-	-	860	-	_	_	-	813	813
Ecuador	61,811	-	-	-	_	_	-	-	-	-
Equatorial Guinea	4,328	-	-	-	_	_	-	-	-	_
Gabon	1,581	-	-	641	-	_	-	-	-	-
Iran	-	-	-		-	_	-	-	-	_
Iraq	182,712	-	-	1,123	-	_	-	-	-	-
Kuwait	46,740	-	_	1 000	_	_	-	-	-	_
Libya	16,961	-	_	1,682	_	_	_	-	- -	F 060
Nigeria	90,407	_		1,379	_	_	_	-	5,863	5,863
Qatar Saudi Arabia	299,370	-	_	501	-	_	_	_	-	_
United Arab Emirates	6,433			2,829	_	_	_		_	
Venezuela	197,047	199		611	_	56	56	_	5,607	5,607
• 5110Zuola	197,047	133	_	"''	_	30		_	3,007	5,007
Non-OPEC	1,447,671	46,677	8,840	141,970	_	10,356	10,356	65,982	115,022	181,004
Argentina		_		106	_	-	-	-	810	810
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	648	-	-	-	-	_	-	-	-	_
Bahamas	-	-	-	36	_	_	_	-	-	-
Bahrain	-	_	_	-	-	_	-	-	-	_
Belgium	-	-	43	11,726	_	837	837	856	2,388	3,244
Brazil	63,663	-	-	948	-	_	-	-	680	680
Brunei	245	-	-	-	_	_	_	-	-	_
Cameroon				219	-		-			
Canada	1,035,983	42,619	7,579	2,363	_	4,433	4,433	34,749	20,093	54,842
Chad	6,151	-	-	-	-	_	-	-	-	-
China	100,000	_	_	4 500	_	_	-	-	0.400	0.400
Colombia	102,332	60	-	1,599	-	_	_	-	2,468	2,468
Congo (Brazzaville)	951	_	_	- 006	_	9	_	36	242	270
Denmark	1,230 2,620	-	_	986	_	9	9	36	343 259	379 259
Egypt Estonia	2,020	_	_	_	_	_	_	_	209	208
Finland	_			224	_	308	308	82	2,510	2,592
France	_	_	_	1,740	_	88	88	4,674	3,684	8,358
Germany	_	_	_	774	_	207	207	158	245	403
Guatemala	2,956	_	_	-	_	_		-	-	-
India	_,,,,,	_	_	3,540	_	8	8	529	17,815	18,344
Indonesia	3,868	_	_	_	_	_	_	_	, –	_
Italy	´ -	-	-	891	-	327	327	269	3,594	3,863
Korea, South	-	-	-	-	-	225	225	-	2,698	2,698
Latvia	-	_	_	_	_	_	_	_	-	_
Lithuania	-	-	-	103	_	_	_	-	1,138	1,138
Malaysia	-	-	-	736	_	_	_	-	228	228
Mexico	175,157	1,171	235	109	-	116	116	-	1,503	1,503
Netherlands	-	-	-	5,763	-	567	567	3,293	7,464	10,757
Netherlands Antilles	-		-	-	-	_	-	-	-	-
Norway	12,900	815	_	6,899	_	236	236	1,263	2,643	3,906
Oman	2,957	-	-	-	-	-	- 007	- 4 4 4 4 0	- 0.010	7 75 4
Portugal	15.010	-	_	124	_	307	307	1,142	6,612	7,754
Russia	15,312	-	_	81,901	_	179	179	368	12,861	13,229
Spain	_	- 511		3,442	_	114 271	114 271	86 128	10,417 1,097	10,503 1,225
Sweden	_	511		1,412		2/1	2/1	128	1,097	1,225
Trinidad and Tobago	2,479	386		1,410		2	2	_	750	750
United Kingdom	6,492	233	_	1,297	_	1,539	1,539	18,318	7,249	25,567
Vietnam	453		_	-,257	_	- 1,000	- 1,000	-	7,2.0	
Virgin Islands, U.S.	-100	_	_	_	_	_	_	_	_	_
Yemen	855	_	_	_	_	_	_	_	_	_
Other	10,419	882	983	13,622	_	583	583	31	5,472	5,503
Total	2,417,839	46,876	8,840	188,172	_	10,412	10,412	65,982	127,305	193,287
Persian Gulf <sup>3</sup>	535,255	,	-,•	4,453			,	,-32	,	,
	5 45 755		_	4 4 4 5 3	_		_			

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

	Oxyge	nates	Renewable Fuels Distillate Fuel Oil						Dil		
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC							323		420		743
Algeria	_	_	_	_	_	_	323	_	420	_	743
Angola	_	_	_	_	_	_	_	_	_	-	_
Ecuador	-	-	-	-	_	_	-	-	_	-	_
Equatorial Guinea	-	_	_	_	_	_	-	-	-	-	_
Gabon	-	-	-	-	_	_	-	_	_	-	-
Iran	_	_	ı	ı	-	_	-	-	-	-	_
Iraq Kuwait	_	_	_	_	_	_	_	_	_	_	_
Libya	_	_	_	_	_	_	_	_	_	_	_
Nigeria	-	-	-	-	-	-	323	-	-	-	323
Qatar	-	-	-	-	_	-	_	_	_	_	-
Saudi Arabia	-	-	_	_	-	-	-	-	-	-	_
United Arab Emirates	-	-	-	-	-	_	-	_	-	-	-
Venezuela	-	_	_	_	_	_	_	_	420	-	420
Non-OPEC	1,873	1,330	1,328	8,648	4,085	_	26,864	386	10,989	1,083	39,322
Argentina	215	-,555	-	6,920	-	_		-	-	-	-
Aruba	_	-	-		-	_	_	_	_	-	_
Australia	-	-	-	-	-	_	-	-	-	-	_
Bahamas	-	-	-	-	-	-	-	-	119	-	119
Bahrain Belgium	234	_	_	_	_	_	_	_	422	260	682
Brazil	431	1,330	1,328	_	_	_	_	_	556	200	556
Brunei	-	- 1,000	- 1,020	_	_	_	_	_	-	-	-
Cameroon	-	_	-	_	_	_	_	_	_	-	_
Canada	_	-	-	1,595	220	_	22,826	386	8,181	219	31,612
Chad	-	-	-	-	-	_		-	_	-	
China	-	-	-	-	-	-	502	-	-	-	502
Colombia Congo (Brazzaville)	_	_	_	_	_	_	183	_	70 205	_	253 205
Denmark	_	_	_	_	_	_	_	_	205	_	203
Egypt	_	-	-	_	_	-	_	-	-	-	_
Estonia	-	-	-	-	_	-	_	_	_	_	-
Finland	-	-	_	_	-	-	-	-	-	-	_
France	-	-	-	-	_	_	_	_	-	115	115
Germany	161	_	-	50	_	_	_	_	_	_	
India	_	_	_	_	_	_	2,503	_	100	114	2,717
Indonesia	_	-	_	_	_	_	_,-	_	_	-	
Italy	-	-	-	_	_	-	-	-	-	-	_
Korea, South	-	-	-	54	-	_	476	-	-	-	476
Latvia	-	_	_	_	_	_	_	_	_	-	
Lithuania Malaysia	_	_	_	_	_	_	- 75	_	_	_	- 75
Mexico	_	_	_	_	_	_	75	_	100	_	100
Netherlands	766	-	-	-	-	-	-	-	44	-	44
Netherlands Antilles	_	_	_	_	_	_	-	-	-	-	_
Norway	-	_	-	_	-	_	_	_	-	-	
Oman	_	-	_	_	_	_	_	_	_	-	_
Portugal	_	_	_	_	_	_	_	-	636	375	_ 1,011
Spain	_	-	-	_	_	-	-	-	12	-	1,011
Sweden	_	-	_	1	_	_	-	_	19	-	19
Syria	-	_	_	_	_	_	_	-	_	-	_
Trinidad and Tobago	_	_	_	_	_	_	_	_	351	-	351
United Kingdom	66 -	_	_	_	_	_	_	_	4	-	4
Vietnam Virgin Islands, U.S		_	_	-	_	_	_	_	_	_	_
Yemen	_	_	_	_	_	_	_	_	_	-	_
Other	0	0	0	29	3,865	-	299	0	170	0	469
Total	1,873	1,330	1,328	8,648	4,085	_	27,187	386	11,409	1,083	40,065
Persian Gulf <sup>3</sup>	-	-	_	_	_	_	_	_	-	-	-

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

							Residual	Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OBEC				4,939	37	1,007	612	4,030	5,649
OPEC		_	_	4,535	- J	347	012	4,030	3,049
Angola	_	_	_	_	_	J47	_	_	J47 _
Ecuador	_	_	_	10	_	_	_	174	174
Equatorial Guinea	_	_	_	-	_	_	_	_	-
Gabon	-	_	_	_	_	-	_	-	_
Iran	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	101	-	-	-	-	-
Kuwait	-	_	_	181	_	_	_	_	_
Libya	-	-	-	-	-	85	612	-	697
Nigeria	-	-	_	-	-	_	_	-	_
Qatar	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	637	37	-	-	-	-
United Arab Emirates	-	-	-	279	-	-	-	_	_
Venezuela	-	_	_	3,731	_	575	_	3,856	4,431
Non-OPEC	1,167	96	_	43,383	4,292	2,536	5,774	42,544	50,854
Argentina	1,107	-		43,303	4,232	456	261	42,344	717
Aruba	_	_	_	151	_	-	201	_	
Australia	_	_	_	-	_	_	_	_	_
Bahamas	-	_	_	43	_	-	_	690	690
Bahrain	_	_	_	_	_	_	_	_	_
Belgium	-	_	_	-	17	-	-	112	112
Brazil	_	_	_	13	161	_	298	54	352
Brunei	-	-	-	-	_	-	-	-	_
Cameroon	-	-	-	-	-	-	-	-	-
Canada	-	62	_	6,090	1,461	235	1,429	7,978	9,642
Chad	-	-	_	6	-	-	-	-	_
China	168	-	_	3,890	-	_	-	-	-
Colombia	-	-	-	-	-	240	717	1,274	2,231
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Egypt	-	-	_	96	_	-	-	-	_
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	_	-	-	-	-	- 070	- 070
France	-	-	_	_	41 57	_	_	272	272
Germany	_	_	_	_	57	_	_	1	1
Guatemala	_	_	_	2,447	_	_	81	171	252
Indonesia	_	_	_	2,447	_	_	-	-	
Italy	_	_	_	_	37	_	_	444	444
Korea, South	55	_	_	24,607	911	_	_		
Latvia	-	_	_		_	_	_	_	_
Lithuania	_	_	_	_	_	_	_	_	_
Malaysia	-	-	-	344	_	-	-	-	_
Mexico	_	_	_	_	334	502	709	16,970	18,181
Netherlands	-	34	_	-	65	-	-	1,482	1,482
Netherlands Antilles	-	-	-	-	-	-	_	-	-
Norway	_	-	_	_	-	_	_	-	_
Oman	-	_	_	_	-	-	-	-	_
Portugal	-	-	_	-	14	-	-	-	-
Russia	-	-	-	308	-	907	482	3,970	5,359
Spain	-	_	-	_	_	-	_	- 074	-
Sweden	-	-	_	_	_	-	-	274	274
Syria Trinidad and Tobago	_	_	_	_	_	_	321	4,745	5,066
United Kingdom	_	_	_	_		_	321	4,745	3,066
Vietnam	_	_	_	_		_	_	3	- J
Virgin Islands, U.S	_		_	_	_	_		_	
Yemen	_	_	_	_		_		_	
Other	944	0	_	5,388	1,194	196	1,476	4,104	5,776
Total	1,167	96		48,322	4,329	3,543	6,386	46,574	56,503
	1,10/	30	_	+0,322	4,329	J 3,343	0,300	40,374	50,503
Persian Gulf <sup>3</sup>				1,198	37				

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2017 (Thousand Barrels) - Continued

	Petroch Feeds	nemical stocks									Daily Average	
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
OPEC	326	_	_	192	1,067	2,270	_	73,963	1,044,131	3,191	243	3,435
Algeria	326	_	_	-	- 1,007	387	_	37,636	60,623	76	124	199
Angola	-	_	_	_	_	-	_	1,673	41,464	131	6	136
Ecuador	-	-	_	_	-	-	_	184	61,995	203	1	204
Equatorial Guinea	_	_	_	_	_	_	_	_	4,328	14	_	14
Gabon	_	_	_	_	_	_	_	641	2,222	5	2	7
Iran	-	-	_	_	_	_	_	-	-	-	-	-
Iraq Kuwait	_	_	_	_	_	_	_	1,224 181	183,936 46,921	601 154	1	605 154
Libya	_	_	_	_	_	_	_	2,379	19,340	56	8	64
Nigeria	_	_	_	_	_	_	_	7,565	97,972	297	25	322
Qatar	_	_	_	_	_	1,390	_	1,390	1,390		5	5
Saudi Arabia	-	_	_	_	-	22	_	1,197	300,567	985	4	989
United Arab Emirates	_	-	-	_	_	471	-	3,579	10,012	21	12	33
Venezuela	-	-	_	192	1,067	-	_	16,314	213,361	648	54	702
Non-OPEC	9,528	4,098	1,431	2,700	10,772	10,090	37	584,091	2,031,762	4,762	1,921	6,683
Argentina	_	310	_	1,061	-	18	_	10,157	10,157	_	33	33
Aruba	-	-	_	_	_	_	-	151	151	_	0	0
Australia	-	-	_	_	_ 66	_	_	954	648 954	2	3	2
Bahamas Bahrain	_	_	_	_	00	665	_	665	665		2	2
Belgium	2	_	_	_	_	487	_	17,384	17,384		57	57
Brazil	_	_	63	145	_	23	_	6,045	69,708	209	20	229
Brunei	-	-	_	_	_	_	_	_	245	1	-	1
Cameroon	-	-	_	_	-	-	-	219	219	-	1	1
Canada	759	721	569	507	9,059	3,094	17	177,354	1,213,337	3,408	583	3,991
Chad	_	_	_	_	-	_	_	6	6,157	20	0	20
China	- 4 770	-	470	114	_	_	_	5,144	5,144	337	17	17
Colombia Congo (Brazzaville)	1,770 –	_	_	202	_	_	_	8,584 205	110,916 1,156	337	28	365 4
Denmark	_	_	_	_	_	_	_	1,374	2,604	4	5	9
Egypt	-	_	_	_	_	_	_	355	2,975	9	1	10
Estonia	-	-	_	171	-	-	_	172	172	-	1	1
Finland	-	_	_	_	_	82	_	3,206	3,206	_	11	11
France	44	220	_	_	_	152	_	11,030	11,030	_	36	36
Germany	15	-	16	1	1	323	_	2,017	2,017	10	7	7
GuatemalaIndia	-	-	_	_	_	_	_	27,308	2,956 27,308	10	90	10 90
Indonesia	_	_	_	_	_	636	_	636	4,504	13	2	15
Italy	14	_	8	_	-	185	_	5,780	5,780	-	19	19
Korea, South	36	-	3	-	-	3,997	_	33,062	33,062	-	109	109
Latvia	_	-	_	-	_	-	_	-	_	-	-	-
Lithuania	-	-	_	-	_	-	-	1,241	1,241	-	4	4
Malaysia	2.898	-	140	_	209	44	_	1,776	1,776	- 576	6 81	6
Mexico Netherlands	2,898	_	- 1	_	_	_	20	24,647 19,694	199,804 19,694	5/6	65	657 65
Netherlands Antilles	151	_	_	_	_	_	-	19,094	19,094		-	-
Norway	_	2,663	_	_	_	_	_	14,519	27,419	42	48	90
Oman	_	,,,,,,,	-	-	_	65	_	65	3,022	10	0	10
Portugal	-	-	-	_	_	-	-	8,199	8,199	-	27	27
Russia	167	-	_	-		71	-	102,227	117,539	50	336	387
Spain	-	-	8	_	1,260	_	-	15,339	15,339	_	50	50
Sweden	-	-	-	8	_	21	-	3,741	3,741	-	12	12
Syria Trinidad and Tobago	-	-	_	_	_	_	_	7,965	10,444	_ 8	26	34
United Kingdom	468	_	_	195	_	156	_	29,528	36,020	21	97	118
Vietnam	-	_	_	-	_	-	-		453	1	-	1
Virgin Islands, U.S	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	855	3	-	3
Other	3,204	184	153	296	176	71	0	43,342	53,761	35	143	177
Total	9,854	4,098	1,431	2,892	11,839	12,360	37	658,054	3,075,893	7,953	2,165	10,118
Persian Gulf <sup>3</sup>	_	_	_	_	_	2,548	_	8,236	543,491	1,761	27	1,788

 <sup>=</sup> No Data Reported.
 Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.
 Note: Totals may not equal sum of components due to independent rounding.
 Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."
 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	line Blending C	components
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	24,695	_	_	_	_	_	_	_	1,592	1,592
Algeria	,	_	_	_	_	_	_	_	-,002	-,,,,,,
Angola	2,427	-	_	_	_	_	_	_	-	_
Ecuador	-	-	_	-	-	-	-	-	-	_
Equatorial Guinea	-	-	-	-	_	_	_	_	-	_
Gabon	-	-	_	_	_	-	-	-	-	_
Iran	0.700	-	-	-	-	-	-	-	-	_
Iraq Kuwait	2,738	_	_	_	_	_	_	_	_	_
Libya	4,445	_	_	_	_	_	_	_	_	
Nigeria	12,233	_	_	_	_	_	_	_	322	322
Qatar	12,200	_	_	_	_	_	_	_	-	-
Saudi Arabia	2,524	-	_	_	-	_	_	_	-	_
United Arab Emirates	_,	_	_	_	_	_	_	_	_	_
Venezuela	328	_	_	_	_	_	_	_	1,270	1,270
Non-OPEC	8,764	1,019	245	1,182	_	519	519	4,978	6,529	11,507
Argentina	-	- 1,015		- 1,102	_	-	-	-,576	- 0,525	- 11,507
Aruba	_	_	_	_	_	_	_	_	-	_
Australia	_	_	_	_	-	_	_	_	-	_
Bahamas	-	-	-	-	-	_	-	-	-	-
Bahrain	-	-	-	-	-	_	-	-	-	_
Belgium	-	-	-	232	-	_	-	-	-	-
Brazil	-	-	_	_	_	_	-	-	-	-
Brunei	-	-	-	_	_	_	_	-	-	_
Cameroon	6,056	1,019	_ 245	- 119	_	273	273	3,575	965	4,540
Canada Chad	0,030	1,019	243	119	_	2/3	2/3	3,373	905	4,540
China	_	_	_	_	_	_	_	_	_	_
Colombia	474	_	_	_	-	_	_	_	217	217
Congo (Brazzaville)	-	-	-	-	-	_	_	-	-	-
Denmark	600	-	-	_	-	_	_	-	-	-
Egypt	-	-	-	_	-	_	-	-	-	-
Estonia	-	-	_	_	-	_	-	-	-	-
Finland	-	-	-	_	_	_	_	-	183 1,007	183
France	_	_	_	_	_	_	_	_	91	1,007 91
Guatemala	_	_	_	_	_	_	_	_	91	91
India	_	_	_	_	_	_	_	_	591	591
Indonesia	_	-	_	_	-	_	_	_	-	_
Italy	-	-	-	-	-	_	_	-	902	902
Korea, South	-	-	-	-	-	_	-	-	-	-
Latvia	-	_	_	_	_	_	_	_	_	_
Lithuania	-	-	_	_	-	_	-	-	_	<del>-</del>
Malaysia	-	_	_	_	_	_	_	_	_	_
Mexico Netherlands	_	_	_	_	_	_	_	_	30	30
Netherlands Antilles	_	_	_	_	_	_	_	_	_	
Norway	1,011	-	-	-	-	_	-	-	305	305
Oman	_	_	_	_	_	_	_	_	-	-
Portugal	-	-	-	124	-	_	_	-	280	280
Russia	_	_	_	205	-	_	_	_	1,007	1,007
Spain	-	_	_	129	_	_	_	_	270	270
Sweden	_	-	_	_	_	_	-	-	_	_
Syria Trinidad and Tobago	-	_	_	_	_		_	_	_	
United Kingdom		_	_	_	_	246	246	1,403	76	1,479
Vietnam	_	_	_	_	_			-, .50	-	-, ., ., -
Virgin Islands, U.S	-	-	-	-	-	_	-	-	-	_
Yemen	-	-	-	_	-	_	_	_	_	_
Other	623	0	0	373	_	0	0	0	605	605
Total	33,459	1,019	245	1,182	_	519	519	4,978	8,121	13,099
	-	.,		.,				.,570	5,.21	
Persian Gulf <sup>3</sup>	5,262	-	_	-	_	_	-	-	-	-

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

	Oxyge	enates		Renewal	ole Fuels			Di	stillate Fuel (	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC	_	_	_	_	_	_	_	_	_	_	_
AlgeriaAngola	_	_	_	_	_	_	_	_	_	_	_
Ecuador	_	_	_	_	_	_	_	_	_	_	_
Equatorial Guinea	_	_	_	_	_	_	_	_	_	_	_
Gabon	-	_	_	_	_	_	_	_	-	-	_
Iran	-	_	_	_	_	_	_	_	_	-	_
Iraq	-	_	_	_	-	_	_	_	_	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	_
Libya	-	-	-	-	-	_	_	_	-	-	-
Nigeria	-	_	_	_	_	_	_	-	_	-	_
Qatar Saudi Arabia	_	_	_	_	_	_	_	_	_	_	_
United Arab Emirates		_	_	_	_	_	_	_	_	_	
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	_	69	138	_	_	2,983	42	340	97	3,462
Argentina	_	_	_	_	_	_	_	_	_	_	_
Australia	_	_	_	_	_	_	_	_	_	_	
Bahamas	_	_	_	_	_	_	_	_	_	_	_
Bahrain	_	_	_	_	_	_	_	_	_	_	-
Belgium	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	_	69	-	-	_	_	-	-	_	_
Brunei	-	_	-	_	-	_	-	-	_	-	_
Cameroon	-	-	-	_	_	_	-	-	-	-	-
Canada Chad	-	-	-	88	_	_	2,983	42	340	97	3,462
China	_	_	_	_	_	_	_	_	_	_	_
Colombia	_	_	_	_	_	_	_	_	_	_	_
Congo (Brazzaville)	_	_	_	_	_	_	_	_	_	-	_
Denmark	-	_	-	-	_	-	-	_	-	_	-
Egypt	-	_	_	_	-	-	-	-	_	_	-
Estonia	-	_	_	-	_	-	-	_	_	-	-
Finland	_	_	_	_	_	_	_	-	_	-	_
France	-	_	_	50	_	_	_	_	_	-	_
Guatemala	_	_	_	-	_	_	_	_	_	_	_
India	_	_	_	_	_	_	_	_	_	-	_
Indonesia	-	_	_	_	_	_	_	_	_	_	-
Italy	-	_	_	_	_	_	_	_	_	-	-
Korea, South	-	_	_	_	-	_	_	_	_	-	-
Latvia	-	_	_	_	_	_	_	_	_	-	
Lithuania	_	_	_	_	_	_	_	_	_	_	_
Malaysia Mexico	_	_	_	_	_	_		_	_	_	
Netherlands	_	_	_	_	_	_	_	_	_	_	_
Netherlands Antilles	-	_	_	_	_	_	_	_	_	_	_
Norway	_	_	_	_	-	_	_	_	-	-	_
Oman	-	_	_	_	_	_	_	_	_	_	_
Portugal	-	_	_	_	_	_	_	_	_	-	
Russia	-	_	_	_	_	_	_	_	_	_	_
Spain	_	_	_	_	_	_	_	_	_	_	
Syria	_	_	_	_	_	_	_	_	_	_	
Trinidad and Tobago	_	_	_	_	_	_	_	_	_	_	_
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	_	-	-	-	-	-	-	-	_	_	-
Virgin Islands, U.S	_	_	_	_	_	_	_	_	_	_	_
Yemen	_	_	_	_	_	_	_	_	_	_	_
Other	-	_	0	0	_	_	0	0	0	0	0
Total	-	-	69	138	_	_	2,983	42	340	97	3,462
Persian Gulf <sup>3</sup>						I	I		I		

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

							Residual	Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC				787					
Algeria	_	_	_	707		_		_	
Angola	_	_	_	_	_	_	_	_	
Ecuador	-	_	-	-	_	-	_	-	
Equatorial Guinea	-	-	-	_	-	-	-	-	
Gabon	-	-	-	-	-	-	-	-	
Iran	-	_	_	_	-	_	-	-	
Iraq	-	-	-	-	-	-	-	-	
Kuwait	-	-	-	181	_	-	_	-	
Libya	-	_	-	_	-	-	-	-	
Nigeria	-	_	-	-	_	-	_	-	
Qatar Saudi Arabia	_	_	_	280	_	_	_	-	
United Arab Emirates	_	_	_	280		_	_	_	
Venezuela	_		_	326		_		_	
• 01102u01u	_	_	_	520	_		_	_	
Non-OPEC	315	1	_	2,832	_	_	653	1,783	2,43
Argentina	-	-	_	_,002	_	_	261	-	26
Aruba	-	_	_	_	_	_		-	
Australia	-	-	-	-	-	-	-	-	
Bahamas	-	-	-	-	-	-	-	-	
Bahrain	-	-	-	_	-	-	-	-	
Belgium	_	-	-	-	-	_	-	-	
Brazil	-	-	-	-	-	-	-	-	
Brunei	-	-	-	-	-	-	-	-	
Cameroon	-	-	-	_	-	-	-	_	
Canada	-	1	-	657	_	-	_	650	65
Chad	-	_	-	-	-	-	-	-	•
China	-	_	-	-		_		-	
Colombia	_	_	-	_	_	_	_	_	
Denmark	_	_	_	_		_		_	
Egypt	_	_	_	_	_	_	_	_	
Estonia	_	_	_	_	-	_	_	_	
Finland	-	_	-	-	_	_	_	-	
France	-	-	-	-	-	-	-	-	
Germany	-	-	_	_	-	-	-	_	
Guatemala	-	-	-	-	-	-	-	-	
India	-	_	_	721	-	-	-	-	
Indonesia	-	_	_	_	-	-	_	_	
Italy	-	-	-	-	_	-	_	-	
Korea, South	-	_	_	588	_	-	_	_	
Latvia Lithuania	-	_	_	_		-	_	-	
Malaysia	_	_	_	344	_	_	_	_	
Mexico	_	_	_	344		_		_	
Netherlands	_	_	_	_		_	_	_	
Netherlands Antilles	_	_	_	_	_	_	_	_	
Norway	-	-	-	-	-	-	-	-	
Oman	_	_	_	_	-	_	_	_	
Portugal	-	-	_	_	-	_	-	-	
Russia	-	-	_	276	-	-	_	461	46
Spain	-	_	_	_	_	_	_	_	
Sweden	-	_	_	_	_	-	_	_	
Syria	-	_	_	_	_	_	_	- 070	^=
Trinidad and Tobago	-	-	_	_	-	-	-	672	67
United Kingdom	_	_	_	_		-		_	
Vietnam Virgin Islands, U.S	_	_	_	_	_	-	_	-	
Yemen	_	_	_	_		_		_	
Other	315	0	_	246		_	392	0	39
	515			240			552		00
Total	315	1	-	3,619	-	-	653	1,783	2,43
Į.						'			

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) - Continued

	Petroch Feeds	nemical stocks								[	aily Average	!
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
OPEC	_	_	_	_	_	15	_	2,394	27,089	797	77	874
Algeria	-	_	-	_	-	-	-	_	-	-	-	-
Angola	_	_	_	_	_	_	_	_	2,427	78	-	78
Ecuador	_	-	_	_	_	_	_	-	-	-	-	_
Equatorial Guinea	-	-	-	-	_	-	_	-	-		-	_
Gabon	-	_	_	_	_	_	_	_	-	_	-	_
IranIraq	_	_	_	_	_	_	_	_	2,738	88	_	88
Kuwait	_	_	_	_	_	_	_	181	181	-	6	6
Libya	_	_	_	_	_	_	_	-	4,445	143	-	143
Nigeria	_	_	_	_	_	_	_	322	12,555	395	10	405
Qatar	_	_	_	_	_	15	_	15	15	_	0	0
Saudi Arabia	-	_	-	_	_	-	-	280	2,804	81	9	90
United Arab Emirates	-	_	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	_	-	_	-	-	1,596	1,924	11	51	62
				_								
Non-OPEC	_	_	77	3	517	140	_	24,462	33,226	283	789	1,072
Aruba	-	_	_	_	_	_	_	261	261	_	8	8
Aruba Australia	_	_	_	_	_	_	_	_	_	_	-	_
Bahamas	_	_	_	_	_	_	_	_	_		_	
Bahrain	_	_	_	_	_	_	_	_	_	_	_	_
Belgium	_	_	_	_	_	_	_	232	232	_	7	7
Brazil	_	_	_	_	_	_	_	69	69	_	2	2
Brunei	-	-	-	_	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-	-
Canada	-	_	39	_	472	92	_	11,657	17,713	195	376	571
Chad	-	-	_	_	_	-	_	_	_	-	-	-
China	-	-	36	-	_	_	_	36	36	_	1	1
Colombia	-	-	_	_	_	_	_	217	691	15	7	22
Congo (Brazzaville) Denmark	_	_	_	_	_	_	_	_	600	19	-	- 19
Egypt	_	_	_	_	_	_	_	_	-	19	_	19
Estonia	_	_	_	_	_	_	_	_	_	_	-	_
Finland	-	-	_	-	-	-	-	183	183	_	6	6
France	-	_	_	-	-	6	-	1,013	1,013	-	33	33
Germany	_	-	-	_	_	12	_	153	153	_	5	5
Guatemala	-	_	_	-	_	_	-	_	-	-	_	_
India	-	-	-	_	-	_	_	1,312	1,312	_	42	42
Indonesia	-	_	_	_	_	_	_	- 004	-	-	-	-
Italy	_	_	_	_	_	23	_	904 612	904 612		29 20	29 20
Korea, South Latvia	_	_		_	_	23	_	012	012	_	20	20
Lithuania		_		_	_		_	_			_	
Malaysia	_	_	-	-	_	-	-	344	344	_	11	11
Mexico	-	_	-	_	-	-	-	-	-	-	-	_
Netherlands	_	_	-	_	_	_	-	30	30	_	1	1
Netherlands Antilles	-	_	-	-	-	-	-			-	_	-
Norway	-	_	_	_	_	-	_	305	1,316	33	10	42
Oman	-	_	_	-	-	-	_	404	404	-	-	-
Portugal Russia	_	_	_	_	_	_ 4	_	404 1,953	404 1,953	_	13 63	13 63
Spain	_	_	_	_	45	4	_	1,953	1,953	_	14	14
Sweden	_	_	_	_	-	-	_	-		_	-	-
Syria	-	_	-	-	-	-	-	-	-	-	-	_
Trinidad and Tobago	-	-	-	-	-	-	-	672	672	_	22	22
United Kingdom	-	-	-	-	-	1	-	1,726	1,726	-	56	56
Vietnam	-	-	-	_	-	-	-	_	-	-	-	-
Virgin Islands, U.S	-	_	_	_	-	_	_	-	-	_	-	
Yemen	-	-	- 1	- 2	_ 0	_ 0	-	1 005	0.550	- 21	- 63	_ 95
Other	-	_	1	3	0		_	1,935	2,558	21	63	85
Total	-	-	77	3	517	155	_	26,856	60,315	1,079	866	1,946
		1		1		i	1					

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	soline	Motor Gaso	line Blending Co	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	_	_	_	_	_	_	_	_	_	
Algeria	-	-	_	_	_	-	-	-	-	
Angola	-	-	-	-	_	-	_	_	-	
Ecuador	-	-	-	_	_	-	_	-	-	
Equatorial Guinea	-	-	-	-	-	-	-	-	-	
Gabon	-	-	-	_	_	-	_	_	-	
IranIraq	_	-	_	_	_	_	_	_	_	
Kuwait	_		_	_	_	_	_	_		
Libya	_	_	_	_	_	_	_	_	_	
Nigeria	-	-	_	_	_	_	_	_	_	
Qatar	-	-	_	_	_	_	_	-	_	
Saudi Arabia	_	_	_	_	_	_	_	_	-	
United Arab Emirates	-	-	_	-	-	-	_	-	-	
Venezuela	-	-	_	_	_	_	_	_	-	
N. ODEO	<b></b> .									<u>.</u> -
Non-OPEC	68,179	2,025	349	_	-	_	-	-	369	36
Argentina	-	-	-	-	_	_	_	_	-	
Aruba Australia				_	_		_	_	_	
Bahamas	_	_	_	_	_	_	_	_		
Bahrain	_	_	_	_	_	_	_	_	_	
Belgium	-	_	_	_	_	-	_	_	_	
Brazil	-	-	_	_	_	_	_	-	_	
Brunei	-	-	_	-	-	-	_	-	-	
Cameroon	-	-	_	_	_	-	_	-	-	
Canada	68,179	2,025	349	-	_	-	_	-	369	36
Chad	-	-	-	_	_	-	_	_	_	
China	-	-	-	-	-	-	-	_	-	
Colombia	-	-	-	_	_	_	_	_	_	
Congo (Brazzaville)  Denmark				_	_	_	_	_	_	
Egypt	_	_	_	_	_	_	_	_	_	
Estonia	_	_	_	_	_	_	_	_	_	
Finland	-	-	-	-	-	-	-	-	-	
France	-	-	-	-	-	-	-	-	-	
Germany	-	-	_	_	_	_	_	_	_	
Guatemala	-	-	-	_	-	_	_	_	_	
India	-	-	-	-	-	_	-	-	-	
Indonesia	-	-	-	_	_	_	_	_	_	
Italy Korea, South	_	-	_	_	-	_	_	_	-	
Latvia	_	_	_	_	_	_	_	_		
Lithuania						_		_		
Malaysia	-	-	_	-	_	-	_	-	-	
Mexico	-	-	_	_	_	_	-	-	-	
Netherlands	-	-	_	_	-	-	_	_	_	
Netherlands Antilles	-	-	_	_	_	-	_	_	_	
Norway	-	-	_	_	_	_	_	_	_	
Oman	_	-	_	_	_	_	_	_	-	
Portugal	_	_	_	_	_	_	_	_	_	
Spain	_	_	_	_	_	_	_	_	_	
Sweden	_	_	_	_	_	_	_	_	_	
Syria	-	_	_	_	_	_	_	_	_	
Trinidad and Tobago	-	-	_	_	-	-	_	-	-	
United Kingdom	_	_	_	_	_	_	_	_	-	
Vietnam	-	-	_	_	_	_	_	_	_	
Virgin Islands, U.S	-	-	_	_	_	_	_	_	-	
Yemen	0	_ 0	0	_	_	_	_	_	- 0	
Ou ICI	ا	ا	U	_	_	_	_	_		
Total	68,179	2,025	349	_	_	_	_	_	369	36
	33,173	_,023	0-19	_		_	_			30

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

Country of Origin	Methyl Tertiary Butyl Ether							Greater			
	(MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC	_	_	_	_	_	_	_	_	_	-	_
AlgeriaAngola	_	_	_	_	_	_	_		_	_	_
Ecuador	_	_	_	_	_	_	_	_	_	_	_
Equatorial Guinea	-	_	-	-	-	-	-	_	-	_	_
Gabon	-	-	_	_	_	_	_	-	-	-	_
Iran	-	_	_	-	_	_	_	-	-	_	_
Iraq	-	_	_	_	_	_	_	-	_	_	_
Kuwait	-	-	-	-	-	-	-	_	-	-	
Libya Nigeria	-	_	_	_	_	_	_	_	_	_	_
Qatar	_	_	_	_	_	_	_		_	_	_
Saudi Arabia	_	_	_	_	_	_	_	_	_	_	_
United Arab Emirates	_	_	_	_	_	_	_	_	_	_	_
Venezuela	-	-	_	_	-	_	_	_	_	_	-
Non-OPEC	-	-	-	47	-	-	43	-	-	28	71
Argentina	-	-	_	_	_	_	_	_	_	_	_
ArubaAustralia	-	_	_	_	_	_	_	_	_	_	_
Bahamas	_	_	_	_	_	_	_	_	_	_	_
Bahrain	_	_	_	_	_	_	_	_	_	_	_
Belgium	-	-	-	-	-	-	-	_	-	_	_
Brazil	-	-	-	-	-	-	-	_	-	-	_
Brunei	-	_	_	_	_	_	_	_	_	_	_
Cameroon	-	-	_	_	_	_	_	_	-	_	
Canada	-	_	_	47	_	_	43	_	_	28	71
Chad	-	_	_	_	_	_	_	_	_	_	_
Colombia	_	_	_	_	_	_	_		_	_	_
Congo (Brazzaville)	-	_	_	_	_	_	_	_	_	_	_
Denmark	-	_	_	_	_	_	_	_	_	_	_
Egypt	-	-	-	-	-	-	-	-	-	-	_
Estonia	-	-	_	_	-	_	_	-	_	-	_
Finland	-	-	-	-	-	-	-	_	-	-	_
France	-	_	_	_	_	_	_	_	_	_	_
GermanyGuatemala	_	_	_	_	_	_	_		_	_	
India	_	_	_	_	_	_	_	_	_	_	_
Indonesia	_	_	_	_	_	_	_	_	_	_	_
Italy	-	_	-	-	-	-	-	-	-	-	_
Korea, South	-	_	-	-	-	-	-	-	-	-	_
Latvia	-	_	_	_	_	_	_	_	_	_	
Lithuania	-	_	_	_	_	_	_	_	_	-	_
Malaysia Mexico	-	_	_	_	_	_	_		_	-	_
Netherlands	_		_	_	_	_	_		_	_	
Netherlands Antilles	_		_	_	_	_	_	_	_	_	_
Norway	-	-	-	-	-	-	-	-	-	-	_
Oman	-	-	-	-	-	_	_	-	_	_	_
Portugal	-	_	_	_	_	_	_	-	-	-	-
Russia	-	_	_	_	-	-	-	_	-	_	_
Spain	-	_	_	_	_	_	_		_	-	_
Sweden	_	_	_	_	_	_	_	_	_	_	_
Trinidad and Tobago	_	_	_	_		_	_		_	_	_
United Kingdom	_	-	_	_	_	_	_	_	_	_	_
Vietnam	-	_	_	_	_	_	_	_	_	_	_
Virgin Islands, U.S	-	_	_	_	_	_	_	_	_	-	
Yemen	_	_	_	_	_	_	_	_	_	-	_
Other	-	-	_	0	-	-	0	_	-	0	0
Total				47			40			28	74
Total	-	-	_	47	_	_	43	_	_	28	71
Persian Gulf <sup>3</sup>	_	_	_	_	_	_	_	_	_	_	_

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

							Residual	Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
PEC					_				
Algeria	_	_	_			_		_	
Angola	_	_	_	_	_	_	_	_	
Ecuador	_	_	_	_	-	_	_	_	
Equatorial Guinea	_	-	-	_	_	_	_	_	
Gabon	-	-	-	-	-	-	-	-	
Iran	_	-	_	_	-	-	-	-	
Iraq	-	-	-	-	-	-	-	-	
Kuwait	-	_	-	_	_	-	_	-	
Libya	-	-	-	-	-	-	-	-	
Nigeria	-	-	-	_	_	-	_	-	
Qatar	-	-	-	-	-	-	-	-	
Saudi Arabia	-	_	-	_	-	-	_	_	
United Arab Emirates Venezuela	_	_	_	_	_	-	_	-	
v enezuela	-	_	-	_	_	-	_	-	
on-OPEC		2	_	_	51	_	60		
Argentina	_	_	_		-	_	-	_	
Aruba	_	_	_	_	_	_	_	_	
Australia	_	_	_	_	_	_	_	_	
Bahamas	-	_	_	_	-	_	_	-	
Bahrain	_	_	_	_	-	_	_	_	
Belgium	_	_	_	_	_	_	_	_	
Brazil	_	-	-	_	_	-	_	_	
Brunei	-	-	_	_	-	_	-	-	
Cameroon	-	-	-	-	-	-	-	-	
Canada	_	2	_	-	51	-	60	_	
Chad	-	-	-	-	-	-	-	-	
China	-	-	-	-	-	-	-	-	
Colombia	-	-	-	-	-	-	-	-	
Congo (Brazzaville)	-	-	_	_	_	-	_	-	
Denmark	-	-	-	-	-	-	-	-	
Egypt	-	_	_		_	-		-	
Estonia	_	_	_	_	_	_	_	_	
France	_		_			_		_	
Germany	_	_			_		_		
Guatemala	_	_	_	_	-	_	_	_	
India	_	_	_	_	_	_	_	_	
Indonesia	_	_	_	_	-	_	_	_	
Italy	_	-	-	_	_	_	_	_	
Korea, South	_	-	_	_	-	-	-	_	
Latvia	-	_	_	_	-	-	-	_	
Lithuania	_	-	_	-	-	-	-	_	
Malaysia	-	_	_	-	-	_	_	_	
Mexico	_	-	_	-	-	-	-	-	
Netherlands	_	_	_	_	_	_	_	-	
Netherlands Antilles	_	_	-	-	-	-	_	-	
Norway	-	_	_	_	_	-	_	-	
Oman	_	_	-	-	-	-	_	-	
Portugal	_	_	-		_	_		-	
Spain	_		_		_	_		_	
Sweden	_	_	_						
Syria	_	_	_	_	_	_	_	_	
Trinidad and Tobago	_	_	_	_	_	_	_	_	
United Kingdom	-	_	-	_	_	_	_	_	
Vietnam	_	_	_	_	_	_	_	_	
Virgin Islands, U.S	-	-	-	-	-	_	-	-	
Yemen	_	_	_	-	-	_	-	_	
Other	-	0	-	_	0	-	0	-	
tal	-	2	-	-	51	-	60	-	
ersian Gulf <sup>3</sup>									

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) - Continued

	Petroch Feeds	nemical stocks								[	Daily Average	)
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
OPEC	_	_	_	_	_	1	_	1	1	_	0	0
Algeria	_	-	_	-	_	_	_	_	_	_	_	_
Angola	-	-	_	_	_	_	_	-	-	-	-	_
Ecuador	-	-	-	_	_	_	_	-	-	-	-	_
Equatorial Guinea	-	-	-	_	_	_	_	-	-	_	-	
Gabon	-	-	_	_	_	_	_	-	_	_	-	_
Iran	_	_	_	_	_	_	_	_	-		_	
Iraq Kuwait	_	_	_	_	_	_	_	_	_	_	_	
Libya	_	_	_	_	_	_	_	_	_	_	_	_
Nigeria	_	_	_	_	_	_	_	_	_	_	_	_
Qatar	_	_	_	_	_	1	_	1	1	_	0	0
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	_
United Arab Emirates	-	-	-	-	-	-	-	-	_	-	-	_
Venezuela	-	_	_	_	_	_	_	_	-	-	-	-
			_				_					
Non-OPEC	82	86	6	19	271	198	1	3,676	71,855	2,199	119	2,318
Argentina	-	-	_	_	_	_	_	_	_	_	-	_
Aruba Australia	_	_	_	_	_	_	_	_	-		-	
Bahamas	_		_	_	_	_	_	_	_	_	-	_
Bahrain	_	_	_	_	_	_	_	_	_		_	_
Belgium	_	_	_	_	_	_	_	_	_	_	-	_
Brazil	_	_	_	_	_	_	_	_	_	_	_	_
Brunei	-	-	-	-	-	-	-	-	-	-	-	_
Cameroon	-	-	-	-	-	-	-	-	-	-	-	_
Canada	82	86	6	19	271	198	1	3,676	71,855	2,199	119	2,318
Chad	-	-	-	_	_	_	_	_	-	-	-	_
China	-	-	-	_	-	-	_	-	-	_	-	_
Colombia	-	-	_	-	-	_	-	-	-	-	-	_
Congo (Brazzaville)	-	_	_	_	_	_	_	_	_	_	_	_
Denmark Egypt	_	_	_	_	_	_	_	_	_	_	_	
Estonia	_	_	_	_	_	_	_	_	_	_	_	_
Finland	_	_	_	_	_	_	_	_	_	_	-	_
France	-	-	_	-	_	_	-	_	_	-	-	_
Germany	_	_	-	_	_	_	_	-	_	-	_	_
Guatemala	-	-	-	-	-	-	-	_	-	-	-	_
India	-	_	-	_	-	-	_	-	-	_	-	_
Indonesia	-	-	_	-	_	_	_	_	-	-	_	_
Italy	-	_	_	_	_	_	_	_	-		_	
Korea, South	_	-	-	_	_	_	_	_	_		-	_
Lithuania	_			_	_	_	_		_		_	
Malaysia	_	_	_	-	_	-	-	-	_	_	_	_
Mexico	_	_	-	_	-	-	_	-	-	_	-	_
Netherlands	-	-	-	-	-	-	-	-	_	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	_	_	-	_	_
Norway	-	_	_	-	-	-	_	_	-	_	-	_
Oman	-	-	-	-	-	-	-	_	-	_	-	_
Pussia	_	_	_	_	_	_	_	_	-	_	-	
Russia Spain	_	_	_	_	_	_	_	_	_	_	-	_
Sweden	_	_	_	_	_	_	_	_	_		_	_
Syria	-	-	-	_	_	-	_	_	_	-	-	_
Trinidad and Tobago	_	_	-	-	-	-	-	_	_	_	-	_
United Kingdom	_	_	_	_	-	-	_	_	_	-	-	-
Vietnam	-	_	_	-	_	-	-	_	_	-	-	_
Virgin Islands, U.S	-	_	_	-	-	-	-	-	-	_	-	
Yemen	-	-	_	_	_	_	_	-	_	_	_	_
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total	82	86	6	19	271	199	1	3,677	71,856	2,199	119	2,318
Persian Gulf <sup>3</sup>				l	İ	1	I					

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels)

Country of Origin  OPECAlgeriaAngola	Crude Oil <sup>1,2</sup>	Natural Gas								
Algeria		Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
Algeria	43,324			2 607						
	43,324	_	_	<b>3,687</b> 3,687	_	_	_	_	_	
	947	_	_	5,007	_	_	_	_	_	
Ecuador	135	_	_	_	_	_	_	_	_	
Equatorial Guinea	-	-	-	-	-	_	-	_	-	
Gabon	629	-	-	-	-	-	-	-	-	
Iran	_	_	_	_	_	_	_	_	-	
Iraq	14,113	-	-	-	-	-	-	-	-	
Kuwait	732	-	-	-	-	-	-	-	-	
Libya		-	-	-	-	-	-	-	-	
Nigeria	1,111	-	-	-	-	_	-	_	-	
Qatar		-	-	-	-	_	_	_	-	
Saudi Arabia	9,622	-	_	-	-	_	_	_	-	
United Arab Emirates	540 15.495	_	_	_	_	_	_	_	_	
Venezuela	15,495	-	-	-	-	_	-	-	-	
Non-OPEC	43,290	_	183	10,418	_	465	465	_	352	35
Argentina	-	_	-	-	-	_	-	_	-	
Aruba	-	-	-	-	-	-	-	-	-	
Australia	-	-	-	-	-	-	-	-	-	
Bahamas	-	-	-	-	-	-	-	_	-	
Bahrain	-	-	-	-	-	-	-	-	-	
Belgium	-	-	-	1,331	-	-	-	-	-	
Brazil	4,952	-	-	_	-	-	-	-	16	
Brunei	-	-	-	-	-	_	-	-	-	
Cameroon	- 10,000	-	-	-	-	_	-	-	-	
Canada	12,899	_	_	-	_		-	_	-	
Chad	1,066	_	_	-	_	_	_	_	-	
Colombia	4,515			_			_	_		
Congo (Brazzaville)	4,515			_			_	_		
Denmark	_	_	_	360	_	_	_	_	_	
Egypt	447	_	-	-	-	-	-	_	-	
Estonia	-	-	-	_	-	_	_	_	-	
Finland	-	-	-	-	-	293	293	-	-	
France	-	-	-	143	-	_	-	-	-	
Germany	_	-	_	_	_	91	91	_	-	
Guatemala	239	-	-	-	-	-	-	-	-	
India	-	-	-	10	-	_	-	-	-	
Indonesia	-	-	-	-	-	-	-	-	-	
Italy	-	-	-	180	-	_	-	-	-	
Korea, South	-	-	-	-	-	_	-	-	-	
Latvia Lithuania	_	_	_	-	_		-	_	-	
Malaysia	_						_	_	_	
Mexico	17,939	_	32	_			_	_	25	
Netherlands	- 17,959	_	-	1,158	_	39	39	_	311	3
Netherlands Antilles	_	_	_		_	_	_	_	-	Ü
Norway	525	-	-	359	_	_	-	-	-	
Oman	_	_	_	_	_	_	_	_	_	
Portugal	_	-	-	_	_	_	_	_	-	
Russia	_	-	_	5,609	-	22	22	_	-	
Spain	_	_	_	388	-	_	_	_	_	
Sweden	_	-	-	53	-	_	_	_	-	
Syria	-	_	-	-	-		_	_	-	
Trinidad and Tobago	-	-	_	_	-	_	-	_	-	
United Kingdom	708	-	_	67	-	20	20	_	-	
Vietnam	-	-	-	_	-	_	_	_	-	
Virgin Islands, U.S Yemen	_	_	_	_	_		_	_	-	
Other	0	_	151	760		0	0	_	0	
Total	86,614	_	183	14,105	_	465	465	_	352	3:
Persian Gulf <sup>3</sup>	25,007		.30	, . 30		.30	.30			Ū

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

	Oxyge	enates		Renewal	ole Fuels			Di	stillate Fuel C	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
ODEO											
OPEC	_	_	_	_	_	_	_	_	_	-	_
Angola	_	_	_	_	_	_	_	_	_	_	
Ecuador	-	-	-	_	_	-	-	_	-	_	_
Equatorial Guinea	-	-	-	-	-	-	-	_	-	-	_
Gabon	-	-	_	-	-	_	_	-	-	-	-
Iran	-	-	_	-	-	-	-	-	-	-	_
Iraq	-	-	_	_	_	_	_	_	_	_	-
Kuwait Libya		_		_	_	_	_		_	_	
Nigeria	_	_		_	_	_	_	_	_	_	
Qatar	_	_	_	_	_	_	_	_	_	_	_
Saudi Arabia	-	-	_	-	-	-	-	_	-	-	-
United Arab Emirates	_	-	-	-	-	-	-	-	-	_	-
Venezuela	-	-	_	_	_	_	_	_	_	_	-
N 0050											
Non-OPEC	87	124	_	_	_	_	_	_	207	-	207
Argentina		_	_	_	_	_	_	_	_	_	<del>-</del>
Australia	_	_		_	_	_	_	_	_	_	
Bahamas	_	_	_	_	_	_	_	_	_	_	_
Bahrain	_	_	_	_	_	_	-	_	-	-	_
Belgium	-	-	-	-	-	-	_	_	_	-	_
Brazil	87	124	-	-	-	_	-	-	-	-	-
Brunei	-	-	_	-	-	_	-	-	-	-	_
Cameroon	-	-	_	_	_	_	_	_	_	_	_
Canada Chad	_	_	_	_	_	_	_	_	_	_	_
China	_	_	_	_	_	_	_	_	_	_	
Colombia	_	_	_	_	_	_	_	_	_	_	_
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	_
Denmark	-	-	-	-	-	-	-	-	-	-	_
Egypt	-	-	-	-	-	-	_	-	_	-	_
Estonia	-	-	-	_	_	_	_	_	_	_	-
Finland France	-	_		_	_	_	_	_	_	-	
Germany	_	_	_	_	_	_	_	_	_	_	
Guatemala	_	_	_	_	_	_	_	_	_	_	_
India	_	_	_	_	_	_	-	_	_	-	_
Indonesia	-	_	_	-	-	-	-	_	-	-	-
Italy	-	-	-	-	-	_	_	-	_	_	_
Korea, South	-	-	-	_	_	-	-	_	-	-	-
Latvia	-	_		_	_	_	_	_	_	_	_
Lithuania Malaysia		_		_	_	_	_	_	_	_	_
Mexico		_	_	_	_	_	_	_	_		
Netherlands	_	-	-	-	-	-	-	_	-	-	_
Netherlands Antilles	_	-	-	-	-	-	-	-	_	_	-
Norway	_	_	_	_	_	_	_	_	_	_	_
Oman	-	-	_	_	_	_	_	_	_	_	-
Portugal	-	-		_	_	_	_	_	207	-	207
Spain		_		_	_	_	_	_	207	_	207
Sweden	_	_	_	_	_	_	_	_	_	_	_
Syria	-	-	_	-	-	-	-	-	-	-	_
Trinidad and Tobago	_	_	-	-	-	_	-	-	-	_	-
United Kingdom	-	_	_	_	_	_	_	_	-	_	_
Vietnam	_	_	_	_	_	-	-	_	-	_	-
Virgin Islands, U.S	-	_		_	_	_	_	_	_	_	_
Yemen	0	0	_	_	_	_	_	_	0	_	- 0
Od 161	ا	ا	_	_	_	_	_	_		-	U
Total	87	124	-	-	-	_	_	-	207	-	207
Persian Gulf <sup>3</sup>	_	_	_	_	_	_	_	_	_	_	_

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

							Residual	I Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	_	_	_	_	_	_	_	_	
Algeria	_	_	_	_	_	_	_	_	
Angola	-	-	_	_	-	_	_	-	
Ecuador	-	_	-	-	_	-	_	-	
Equatorial Guinea	-	-	_	-	-	_	-	-	
Gabon	-	-	-	_	-	-	-	-	
Iran	-	-	_	-	-	-	-	_	
Iraq	-	-	-	-	-	-	-	-	
Kuwait	-	_	-	-	_	-	-	-	
Libya	-	-	-	-	-	-	-	-	
Nigeria	-	_	-	_	_	-	_	_	
Qatar Saudi Arabia	-	_	_	-	-	_	-	_	
United Arab Emirates	-	_	_	_	_	_		_	
Venezuela	_	_	_	_		-	_	-	
v G11G∠UGIA	-	_	-	_	_	-	_	-	•
Non-OPEC	_	_	_	_	458	_	_	1,378	1,378
Argentina	_	_	_	_	-	_	_	- 1,070	1,07
Aruba	_	_	_	_	_	_	_	_	-
Australia	_	-	_	_	-	_	_	-	
Bahamas	-	-	-	-	-	-	-	-	
Bahrain	-	_	-	-	-	-	-	-	
Belgium	-	-	-	-	17	-	-	-	
Brazil	-	-	-	-	-	-	-	-	
Brunei	-	-	_	_	-	-	-	_	
Cameroon	-	-	-	-	-	-	-	-	-
Canada	-	_	-	-	85	-	-	_	-
Chad	-	-	-	-	-	-	-	-	-
China	-	_	-	-	_	-	_	-	-
Colombia	-	-	-	-	-	-	-	_	•
Congo (Brazzaville)	-	_	_	_	_	_	_	-	-
Denmark Egypt	_	_	_	_	_	_	_	_	_
Estonia	_	_	_	_	_	_	_	_	
Finland	_	_	_	_	_	_	_	_	
France	_	-	_	_	-	_	_	_	
Germany	-	_	_	-	21	-	_	-	
Guatemala	-	_	-	-	-	-	_	-	
India	-	-	_	-	-	_	-	-	
Indonesia	_	-	_	_	-	_	_	_	
Italy	-	_	_	-	37	-	-	_	-
Korea, South	_	-	-	-	97	-	-	-	
Latvia	-	_	_	-	_	_	_	_	
Lithuania	-	-	-	-	-	-	_	-	
Malaysia	-	_	_	_	_	-	_	- 806	80
Mexico	_	_	-	-	-	-	_	806	80
Netherlands Netherlands Antilles	-	_	_	_	51 _	_	_	_	
Norway	_	_	_	_	_	_	_		
Oman	_	_			_		_	_	
Portugal	_	-	_	_	_	_	_	_	
Russia	_	_	_	_	_	_	_	572	57:
Spain	-	-	_	-	-	-	-	-	
Sweden	_	_	_	_	_	_	_	_	-
Syria	-	-	_	-	-	-	-	_	
Trinidad and Tobago	-	-	-	_	-	-	-	-	-
United Kingdom	-	_	-	_	_	_	_	_	
Vietnam	-	-	-	-	-	-	-	-	
Virgin Islands, U.S	-	_	_	_	_	_	_	_	
Yemen	-	_	-	-	-	-	-	_	
Other	-	_	-	-	150	-	_	0	
Total					458			1,378	1,37
i Otai	-	_	-	-	430	-	_	1,3/6	1,37
			1			1		1	

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) - Continued

	Petroch Feeds	nemical stocks									Daily Average	•
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
OPEC	_	_	_	_	_	305	_	3,992	47,316	1,398	129	1,526
Algeria	_	_	_	_	_	-	_	3,687	3,687	-	119	119
Angola	-	-	-	-	-	_	_	_	947	31	-	31
Ecuador	-	-	_	_	_	_	_	_	135	4	-	4
Equatorial Guinea	-	_	_	_	_	_	-	_	-	_	-	_
Gabon	_	_	_	_	_	_	_	_	629	20	-	20
Iraq	_		-	_	_	_	_	_	14,113	455	_	455
Kuwait	_	_	_	_	_	_	_	_	732	24	-	24
Libya	_	_	_	_	-	_	_	_	-		-	
Nigeria	-	-	-	-	_	_	_	_	1,111	36	-	36
Qatar	-	-	_	_	_	259	_	259	259	-	8	8
Saudi Arabia	_	_	-	_	-	_	_	_	9,622	310	-	310
United Arab Emirates	-	-	-	-	-	46	-	46	586	17	1	19
Venezuela	-	_	_	_	_	_	_	_	15,495	500	-	500
Non-OPEC	1,219	46	37	469	_	401	_	15,852	59.142	1,396	511	1,908
Argentina	-	23	-	90	_	1	_	114	114	- 1,000	4	1,500
Aruba	-	_	-	-	-	_	_	-	-	_	-	_
Australia	_	-	_	-	-	-	_	-	-	-	-	-
Bahamas	-	_	_	-	_	_	_	_	-	-	_	-
Bahrain	_	-	-	_	_	_	_	-	-	-	-	-
Belgium	2	-	-	-	-	6	-	1,356	1,356	-	44	44
Brazil	_	_	_	145	_	_	_	372	5,324	160	12	172
Cameroon	_	_	_	_		_	_	_	_		_	
Canada	_	_	_	_	_	_	_	85	12,984	416	3	419
Chad	_	_	_	_	-	_	_	_	1,066	34	-	34
China	-	-	-	114	-	_	_	114	114	-	4	4
Colombia	427	-	_	-	-	-	_	427	4,942	146	14	159
Congo (Brazzaville)	_	_	-	_	-	_	_	_	_	_	-	_
Denmark	-	_	_	_	_	_	_	360	360	_	12	12
Egypt	_	_	-	_	_	_	_	_	447	14	-	14
EstoniaFinland	_	_	_	_	_	61	_	354	354	_	11	11
France	_	23	_	_	_	22	_	188	188	_	6	6
Germany	14	_	_	_	_	6	_	132	132	_	4	4
Guatemala	_	_	_	-	-	_	_	_	239	8	-	8
India	-	_	_	_	_	_	_	10	10	-	0	0
Indonesia	-	_	-	-	-	53	_	53	53	-	2	2
Italy	14	-	-	-	-	2	_	234	234	_	8	8
Korea, South	_	_	_	_	-	236	_	333	333	-	11	11
Latvia Lithuania	_	_	_	_	_	_	_	_	_	_	_	_
Malaysia	_	_	23	_	_	_	_	23	23	_	1	1
Mexico	295	_	_	_	_	_	_	1,158	19,097	579	37	616
Netherlands	-	-	-	-	_	_	-	1,559	1,559	-	50	50
Netherlands Antilles	_	_	-	-	-	_	-	-	_	-	_	_
Norway	_	-	_	_	-	_	-	359	884	17	12	29
Oman	-	-	-	-	_	-	-	-	_	-	_	-
Portugal	-	_	_	-	-	_	-	6,472	6,472	_	209	209
Russia Spain	62	_	_	_ _	_	_	_	388	388	_	13	13
Sweden	_	_	_	_	_	_	_	53	53		2	2
Syria	-	-	-	-	-	-	-	_	-	-		_
Trinidad and Tobago	-	-	-	-	-	-	-	-	_	-	_	-
United Kingdom	23	-	-	8	_	14	-	132	840	23	4	27
Vietnam	_	-	-	-	-	-	-	-	-	-	_	-
Virgin Islands, U.S.	-	-	_	-	-	_	-	_	_	_	_	_
Yemen	382	_ 0	- 14	112	_	_ 0	_	1 570	1 576	- -1	48	- 49
Other					_		_	1,576	1,576			
Total	1,219	46	37	469	_	706	_	19,844	106,458	2,794	640	3,434
Persian Gulf <sup>3</sup>	_	_	_	_	_	305	_	305	25,312	807	10	817

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Note: Totals may not equal sum of components due to independent rounding.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels)

					Finisl	hed Motor Gas	oline	Motor Gasol	ine Blending Co	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
					PAD D	istrict 4				
OPEC	_	_	_	_	_		_	-	_	
Algeria	-	_	-	-	-	-	_	-	-	
Angola	-	-	-	-	-	_	-	-	-	
Ecuador	-	-	-	-	-	-	-	-	-	
Iran Iraq	_	_	_	_	_	_	_	_	_	
Kuwait	-	-	-	-	-	-	-	-	-	
Libya	-	-	-	-	-	_	_	-	-	
Nigeria	-	-	-	-	-	_	-	-	-	
Qatar Saudi Arabia	_	_	_	_	_	_	_	_	_	
United Arab Emirates	-	_	-	_	_	_	_	_	-	
Venezuela	-	-	-	-	-	-	-	-	-	
Non ORFO	0.000	00-								
Non-OPEC	8,398 8,398	365 365	_	-	-	_	_	-	12 12	1
Other	0,398	305 <b>0</b>	_	_	_	_	_	_	0	
	٦	ا							٦	,
Total	8,398	365	-	-	-	_	-	-	12	1:
	•				PAD D	istrict 5				
-										
OPEC	21,637	-	-	1,137	-	_	-	-	-	-
Algeria	462	-	-	765	-	-	-	-	-	
Angola Ecuador	4,930	_	_	_	-	_	_	_	_	-
Iran	-	_	-	_	-	_	-	_	-	
Iraq	5,105	_	-	-	-	_	_	-	-	
Kuwait	2,773	-	-	-	-	-	-	-	-	-
Libya Nigeria	1,002	-	-	_ _	-	_	_	_	_	-
Qatar	_	_	_	_	_	_	_	_	_	
Saudi Arabia	5,296	-	-	-	-	-	-	-	-	
United Arab Emirates	1,025	-	-	372	-	_	_	_	-	
Venezuela	-	-	-	-	-	_	-	-	-	-
Non-OPEC	17,659	1,283	-	4,300	-	36	36	-	503	503
Argentina	-	-	-	-	-	_	-	-	-	
Aruba Australia	-	-	-	_ _	-	-	-	-	-	-
Brazil	1,755	_	_	_	_	_	_	_	_	
Brunei	_	-	-	-	-	_	-	-	-	
Canada	7,188	1,227	-	332	-	36	36	-	450	45
China	2 607	-	-	-	-	_	-	-	-	
Colombia	2,687	_	_	266 98	_		_		_	
Germany	_	_	-	_	_	_	_	_	-	
Indonesia	1,333	-	-	-	-	_	_	_	-	
Japan Korea, South	-	-	-	_	-	-	-	-	-	
Malaysia	_	_	_	410	_	_	_	_	53	5
Mexico	1,166			-		_	_			
Netherlands	_	-	-	_	-	_	_	-	-	
Netherlands Antilles	1,920	-	-	-	-	_	_	-	-	
Oman Papua New Guinea	1,920	_	_	_	_	_	_	_	_	
Peru	63	_	_	48	_	_	_	_	_	
Singapore	-	-	-	437	-	_	-	-	-	
Sweden	_	_	-	_	-	_	_	-	_	
Taiwan United Kingdom	_	-	_	_	-	_	_	-	-	•
Vietnam	_	_	_	_	_	_	_	_	_	
Virgin Islands, U.S	_	-	_	_	_	_	_	_	-	
Other	1,547	56	-	2,709	-	0	0	-	0	
Total	39,296	1,283		5,437		36	36		503	50
ı olar	39,∠90	1,203	_	5,437	_	30	30	_	503	50
						l.				

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

Country of Origin	Oxyge	enates		Renewal	ole Fuels			Di	stillate Fuel 0	Dil		
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total	
						PAD District	4					
OPECAlgeria	_	_	_	_	_	_	_		_	_		
Angola	_	_	_	_	_	_	_	_	-	-		
Ecuador	-	_	_	-	-	-	_	-	_	-		
Iran	-	-	-	-	-	-	-	_	-	-		
Iraq Kuwait	_	_	_	_	_	_	_	_	_	_		
Libya	-	_	_	_	_	-	_	_	_	-		
Nigeria	-	_	_	-	-	-	_	-	_	_		
Qatar	-	_	_	_	-	-	-	-	_	-		
Saudi Arabia United Arab Emirates	_	_	_	_	_	_	_		_	_		
Venezuela	-	-	_	_	_	_	-	_	-	_		
On-OPEC	-	_	-	7	-	-	46 46	-	_	-		
Canada Other	_	_	_	0	_	_	46 <b>0</b>	_	_			
Guior							Ĭ					
otal	-	_	_	7	_	-	46	-	_	-		
	PAD District 5											
	F AD District 9											
PEC	-	-	_	-	-	-	-	_	-	-		
AlgeriaAngola	_	_	_	_	_	_	_	_	_	_		
Ecuador	_	_	_	_	_	_	_	_	_	_		
Iran	-	-	-	-	-	-	-	-	-	-		
Iraq	-	_	_	_	_	_	-	_	-	-		
Kuwait Libya	_	_	_	_	_	_	_		_	_		
Nigeria	_	_	_	_	_	_	_	_	_	_		
Qatar	-	-	_	-	-	-	-	-	_	-		
Saudi Arabia	-	-	_	-	_	-	-	_	-	-		
United Arab Emirates Venezuela	-	-	_ _	_	_ _	_ _	-	_	-	-		
Ion-OPEC	_	_	_	194	387	_	352	_	1	_	3	
Argentina	-	_	_	-	-	_	-	_	-	_	,	
Aruba	-	_	_	-	-	-	_	-	_	-		
Australia	-	-	_	-	_	-	-	_	-	-		
Brazil Brunei	_	_	_	_	_	_	_	_	_	_		
Canada	-	_	_	165	_	-	352	_	1	-	(	
China	-	_	_	-	_	-	_	-	_	-		
Colombia	-	_	-	-	-	-	-	-	_	-		
FinlandGermany	_	_	_	_			_		_	_		
Indonesia	-	-	-	-	-	-	-	-	-	-		
Japan	-	_	-	-	-	-	-	-	-	-		
Korea, South Malaysia	_	_	_	_	_	_	_	_	_	-		
Mexico	-	_	_	_	_	_	-	_	-	_		
Netherlands	-	-	-	-	-	-	-	-	-	-		
Netherlands Antilles	-	_	_	_	_	_	-	_	_	-		
Oman Papua New Guinea	-	_	-	_	_	_	_	_	_	-		
Peru	_	_	_	_	_	_	_	_	_	_		
Singapore	-	-	-	-	-	-	-	-	_	-		
Sweden	_	_	-	-	-	-	-	-	_	-		
Taiwan United Kingdom	-	_	_	_	_	_	_		_	_		
Vietnam	-	_	_	_	_	_	-	_	_	_		
Virgin Islands, U.S	-	-	-	-	_	-	-	-	-	-		
Other	-	_	_	29	387	-	0	-	0	-		
otal	_	_	-	194	387	-	352	-	1	-	3	
1i O163												
ersian Gulf <sup>3</sup>	-	_	_	ı –	-	-	_	_	_	-		

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) — Continued

Country of Origin						Residual Fuel Oil						
	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total			
					PAD District 4							
PEC	_	_	_	_	_	_	_	_				
Algeria	-	-	-	_	-	_	-	-				
Angola	-	-	-	_	-	-	-	-				
Ecuador	-	-	-	-	-	-	-	-				
IranIraq	_		_	_		_	_	_				
Kuwait	_	_	-	_	_	_	-	-				
Libya	-	-	-	-	-	_	-	-				
Nigeria	-	-	-	-	-	-	-	-				
QatarSaudi Arabia	-	-	-	_	-	-	-	-				
United Arab Emirates	_	_	_	-	_	_	_	_				
Venezuela	-	-	-	-	-	-	-	-				
on-OPEC	-	1	-	50	-	-	-	-				
Canada Other	_	1 <b>0</b>	_	- 50	_	_	_	_				
	-	ŭ		30	_		_	_				
tal	-	1	-	50	-	-	-	-				
	PAD District 5											
-					r AD District 3							
PEC	-	-	-	-	-	-	-	-				
Algeria	-	-	-	-	-	-	-	-				
Angola Ecuador	_	_	_	_	_	_	_	_				
Iran	-	_	_	_	_	_	-	-				
Iraq	-	-	-	_	-	-	-	-				
Kuwait	-	-	-	-	_	-	-	-				
Libya Nigeria	-	-	-	_	-	-	-	_				
Qatar	_	_	_	_		_	_	_				
Saudi Arabia	-	-	-	-	-	-	-	-				
United Arab Emirates	-	-	-	-	-	_	-	-				
Venezuela	-	_	-	_	_	-	-	_				
n-OPEC	-	4	-	3,476	-	-	106	694				
Argentina	-	_	-	-	-	-	-	-				
Aruba	-	-	-	_	-	-	-	-				
Australia Brazil	_	_	_	_		_	_	_				
Brunei	-	-	-	_	-	-	-	-				
Canada	_	4	-	_	-	-	106	29				
China	-	_	-	492	_	-	-	-				
Colombia Finland	-	_	_	_		_	_	_				
Germany		_	_	_	_	_	_	_				
Indonesia	_	_	-	_	-	_	-	-				
Japan	-	-	_	315	-	-	-	_				
Korea, South Malaysia	-	_	-	2,669	_	-	_	_				
Mexico	_		_	_		_	_	_				
Netherlands	_		_	_	_	_	_	_				
Netherlands Antilles	-	-	_	_	-	_	-	-				
Oman	-	_	-	_	-	_	_	_				
Papua New Guinea Peru	-		_	_		_	_	346				
Singapore	_		_	_	_	_	-	-				
Sweden	-	_	_	_	_	_	_	_				
Taiwan	_	_	_	_	-	_	-	-				
United KingdomVietnam	-	-	-	_	-	-	-	_				
Virgin Islands, U.S	_	_	_	_		_	_	_				
Other	-	0	_	0	-	-	0	319				
	_	4	_	3,476	_	_	106	694				
tal	_	•		-, -								

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2017 (Thousand Barrels) - Continued

Country of Origin	Petrochemical Feedstocks									Daily Average		
	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
						PAD D	istrict 4					
OPEC	_	_	_	_	_	_	_	_	_	_	_	-
Algeria	-	-	-	-	-	-	-	-	-	-	_	
Angola	-	-	_	_	_	_	_	-	-	_	-	
EcuadorIran	_	_	_	_	_	_	_	_	_	_	_	
Iraq	-	-	-	_	-	-	_	_	-	_	_	
Kuwait	-	-	-	-	-	-	-	-	-	-	-	
Libya	-	-	-	_	-	-	-	-	-	-	-	
Nigeria Qatar	_	_	_	_	_	_	_	_			_	•
Saudi Arabia	_	_	_	_	_	_	_	_	_	_	_	
United Arab Emirates	_	-	-	-	-	-	-	-	-	-	-	
Venezuela	-	-	-	-	-	-	-	-	-	-	-	,
Non-OPEC					29		1	511	8,909	271	16	28
Canada	_	_	_	_	29	_	1	461	8,859	271	15	28 28
Other	_	_	_	_	0	_	Ö	50	50	0	1	20
Total	-	-	-	-	29	-	1	511	8,909	271	16	28
						PAD D	istrict 5					
											[	
OPEC	_	_	_	_	_	_	_	1,137 765	22,774 765	698	37 25	73: 2:
AlgeriaAngola	_	_	_	_	_	_	_	765	462	15	25	1
Ecuador	_	-	_	_	_	_	_	_	4,930	159	_	159
Iran	_	-	_	-	-	_	-	-		-	-	-
Iraq	_	_	_	_	_	_	_	_	5,105	165	_	16
Kuwait	_	_	_	_	_	_	_	-	2,773 1,002	89 32	-	89 32
Libya Nigeria	_	_	_	_	_	_	_	_	1,002	32	_	-
Qatar	_	-	_	_	_	_	_	_	_	-	_	
Saudi Arabia	-	-	-	-	-	-	-	-	5,296	171	-	17
United Arab Emirates Venezuela	_	_	_	_ _	_ _	_	_	372 -	1,397 –	33	12	45
Non-OPEC	38	_	39	31	54	27	1	11,526	29,185	570	372	94
Argentina	_	-	_	-	-		_	, 5	-	-	-	
Aruba	_	_	_	_	-	_	_	_	-	-	-	-
Australia	_	_	_	_	_	_	_	-	1 755	- 57	-	5
Brazil Brunei	_	_	_	_	_	_	_	_	1,755	57	_	<b>5</b> .
Canada	_	_	_	31	54	4	1	2,792	9,980	232	90	32
China	_	_	16	_	_	_	_	508	508	-	16	10
Colombia	-	-	-	-	_	-	-	266	2,953	87	9	9
Finland Germany	_	_	_	_	_	_	_	98	98	_	3	; -
Indonesia	_	_	_	_	_	_	_	_	1,333	43	_	4:
Japan	-	-	23	_	-	_	-	338	338	_	11	11
Korea, South	_	_	_	_	_	23	-	2,692	2,692	_	87	8
Malaysia	_	-	_	-	-	_	_	463	463	- 38	15 -	1: 3:
Mexico Netherlands	_	_	_	_	_	_	_	_	1,166	- 38	_	3
Netherlands Antilles	_	_	_	_	_	_	_	_	_	_	-	-
Oman	-	-	-	-	-	-	-	-	1,920	62	_	6
Papua New Guinea	_	_	_	-	_	_	-	_		_	_	-
Peru	_	-	_	-	_ _	_	_	394	457 824	2	13 27	1! 2
Singapore Sweden	_	_	_	_	_	_	_	824 -	624 _		-	2
Taiwan	38	-	-	-	-	-	-	38	38	-	1	
United Kingdom	-	-	-	-	-	-	-	_	-	-	-	-
Vietnam	-	_	_	_	_	_	-	-	-	_	-	
Virgin Islands, U.S Other	_ 0	-	_ 0	0	_ 0	_ 0	_ 0	3,113	4,660	- 49	100	14
Ou ICI	"	_						3,113	4,000	49	100	14
Гоtal	38	-	39	31	54	27	1	12,663	51,959	1,268	408	1,67
Persian Gulf <sup>3</sup>	l _	_	_	_	_	_	_	372	14,571	458	12	47

<sup>- =</sup> No Data Reported.

<sup>The No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.

Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.</sup> 

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gaso	line Blending Co	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	182,083	_	_	5,640	_	56	56	_	11,994	11,994
Algeria	15,854	_	_	4,871	_	_	_	_	_	_
Angola	25,534	-	-	120	-	-	-	-	813	813
Ecuador	-	-	-	-	_	_	-	_	-	-
Equatorial Guinea	-	-	_	-	_	_	-	_	-	_
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	20,435	-	_	-	_	-	-	-	-	_
Iraq Kuwait	20,435	_	_	_	_	_	_	_	_	_
Libya	11,552	_		_	_	_	_	_	_	
Nigeria	80,533	_	_	649	_	_	_	_	5,863	5,863
Qatar	-	_	_	-	_	_	_	_	-	
Saudi Arabia	22,809	-	_	-	_	_	-	_	-	_
United Arab Emirates	,	_	_	_	_	_	_	_	_	_
Venezuela	5,366	_	_	_	_	56	56	_	5,318	5,318
Non-OPEC	104,758	10,786	3,327	13,794	-	8,017	8,017	65,456	89,201	154,657
Argentina	-	-	-	-	-	-	-	-	-	-
Aruba	-	_		-	_	_	-	_	-	
Australia Bahamas	-	-	_	-	-	_	-	-	-	_
Bahrain	_	_		_	_	_	_	_	_	_
Belgium	_			1,316	_	837	837	856	1,484	2,340
Brazil	10,156	_	_	1,010	_	-	-	-	312	312
Brunei	-	_	_	_	_	_	_	_	-	-
Cameroon	_	_	_	_	_	_	_	_	_	_
Canada	59,663	9,856	3,327	380	_	3,783	3,783	34,491	12,332	46,823
Chad	1,903	_	· –	_	_	,   –	,   –	,   –	_	_
China	_	-	-	-	-	_	-	-	-	-
Colombia	11,367	-	-	104	_	-	-	-	2,022	2,022
Congo (Brazzaville)	951	-	-	-	_	_	-	_	-	_
Denmark	1,230	-	-	4	-	9	9	36	302	338
Egypt	1,487	-	_	-	-	-	-	-	259	259
Estonia	-	-	_	-	-	-	-	-	1	1
Finland	-	-	_	100	-	_	-	82	2,510	2,592
France	_	_	_	75	_	116	116	4,674 158	3,247 221	7,921 379
GermanyGuatemala				75	_	110	110	130	221	3/9
India	_	_	_	_	_	8	8	529	15,689	16,218
Indonesia	_	-	_	_	_	_	-	-	-	
Italy	_	_	_	-	_	327	327	269	2,968	3,237
Korea, South	-	-	-	-	_	_	-	_	1,461	1,461
Latvia	_	-	-	-	_	_	-	_	-	_
Lithuania	-	-	_	-	_	_	-	_	495	495
Malaysia		-	_	_	_	_	_	_	175	175
Mexico	1,839	_	_		_			_		_
Netherlands	-		_	744	_	477	477	3,293	5,160	8,453
Netherlands Antilles	11,404	419	_	153	_	-	236	1,263	2 501	2 05 4
NorwayOman	11,404	419	_	103	_	236	236	1,203	2,591	3,854
Portugal	_	_		124	_	307	307	1,142	6,333	7,475
Russia	2,110			5,432		36	36	368	12,451	12,819
Spain	_,,,,,	-	_	2,057	_	114	114	86	9,078	9,164
Sweden	_	511	_	699	_	271	271	128	1,097	1,225
Syria	_	-	_	-	_	-	-	_	_	_
Trinidad and Tobago	_	_	_	_	_	2	2	_	480	480
United Kingdom	645	-	_	361	_	1,494	1,494	18,050	5,612	23,662
Vietnam	_	-	-	_	_	_	_	_	-	-
Virgin Islands, U.S	_	-	_	_	_	_	_	_	_	_
Yemen	-	_	_	-	_	_	_	_	-	-
Other	2,003	0	0	2,245	-	0	0	31	2,921	2,952
Total	286,841	10,786	3,327	19,434	_	8,073	8,073	65,456	101,195	166,651
l l										

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

	Oxyge	nates		Renewal	ole Fuels			Di	istillate Fuel (	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
0050							000		010		640
OPEC	-	_	_	_	_	_	323	_	319	_	642
Algeria Angola			_	_	_	_	_	_	_	_	_
Ecuador	_	_	_	_	_	_	_	_	_	_	_
Equatorial Guinea	_	_	_	_	_	_	_	_	_	_	_
Gabon	_	_	_	_	_	_	_	_	_	_	_
Iran	-	_	-	_	_	_	_	_	_	-	_
Iraq	-	-	-	_	_	_	-	-	_	-	-
Kuwait	-	_	_	_	_	_	_	_	_	_	_
Libya	-	-	-	_	_	_	-	-	_	-	-
Nigeria	-	-	-	_	_	_	323	-	_	-	323
Qatar	-	-	-	_	_	_	_	-	_	-	-
Saudi Arabia	_		_	_	_	_	_	_	_	-	
United Arab Emirates Venezuela	-	_	_	_	_	_	_	_	319	_	319
v el lezuela	-	_	_	_	_	_	_	_	319	-	319
Non-OPEC	_	_	100	5,702	_	_	22,363	386	8,941	180	31,870
Argentina	_	_	-	5,204	_	_		-	- 0,541	-	- 01,070
Aruba	_	_	-		_	_	_	_	_	_	_
Australia	_	_	_	_	_	_	_	_	_	_	_
Bahamas	-	_	-	_	_	_	_	_	119	-	119
Bahrain	-	-	-	-	-	-	-	_	-	-	-
Belgium	-	_	_	_	_	_	_	_	_	_	-
Brazil	-	-	100	_	_	_	_	-	1	-	1
Brunei	-	_	-	-	_	-	-	-	-	-	_
Cameroon	-	_	-	_	_	_	-	_	_	-	-
Canada	-	_	-	448	_	_	19,598	386	8,071	180	28,235
Chad	-	_	_	_	_	_	4	_	_	_	4
ChinaColombia	_	_	_	_	_	_	183	_	70	_	253
Congo (Brazzaville)	_	_	_	_	_	_	100	_	205	_	205
Denmark	_	_	_	_	_	_	_	_		_	_
Egypt	_	_	_	_	_	_	_	_	_	_	_
Estonia	-	-	_	_	_	_	_	_	_	-	-
Finland	-	-	_	_	_	_	_	_	_	-	-
France	-	_	-	_	_	_	-	-	_	-	-
Germany	-	-	-	50	_	_	_	-	_	-	-
Guatemala	-	-	_	_	_	_		_	_	_	
India	-	_	-	_	_	_	2,503	_	_	-	2,503
Indonesia	-	_	_	_	_	_	_	_	_	-	_
Italy	-		_	_	_	_	_	_	_	-	
Korea, South Latvia		_	_	_	_	_	_	_	_	_	_
Lithuania			_			_	_	_		_	
Malaysia	_	_	-	_	_	_	75	-	_	_	75
Mexico	_	_	_	_	_	_	-	_	100	_	100
Netherlands	-	_	_	_	_	_	_	_	_	_	_
Netherlands Antilles	-	_	-	-	-	_	_	-	-	-	_
Norway	-	_	_	-	_	_	_	_	_	_	_
Oman	-	_	_	_	_	_	-	_	_	-	_
Portugal	-	_	-	_	_	_	-	-	-	-	_
Russia	-	_	_	_	_	_	_	_	24	_	24
Spain Sweden	_		_	_	_	_	_	_	_	_	
Syria			_	_	_	_	_	_	_	_	
Trinidad and Tobago	_	_	_	_	_	_	_	_	351	_	351
United Kingdom	-	_	-	_	_	_	_	-	-	_	-
Vietnam	_	_	_	_	_	_	_	_	_	_	_
Virgin Islands, U.S	-	_	-	-	-	-	-	_	-	-	_
Yemen	_	_	_	_	_	_	_	_	_	_	-
Other	_	_	0	0	_	_	0	0	0	0	0
Total	-	_	100	5,702	_	_	22,686	386	9,260	180	32,512
Persian Gulf <sup>3</sup>											

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

Country of Origin   Rerosene   Rerosene   Revosene   Revosene								Residual	l Fuel Oil	
Algeria	Country of Origin	Kerosene	Aviation	Gasoline Blending	Type Jet					Total
Algeria	OPEC	_	_	_	1 781	_	//32	612	2 540	3,584
Angola		_	_	_	-,,,,,,	_		-	2,540	347
Cajador		_	_	_	_	_	-	_	_	-
Equatorial Guinea		_	_	_	10	_	_	_	_	-
First		-	-	-	-	-	_	-	-	-
Iraq	Gabon	_	-	-	-	-	-	-	-	-
Kuwalt		_	_	_	-	_	_	_	_	-
Libya		-	-	_		-	-	_	-	-
Nigeria		-	-	-	181		_	-	-	_
Dalata		-	-	_	1	_	85	612	_	697
Saud Arabia		_	-	_	-	_	_	_	-	
United Arab Emirates   -   -   -   279   -   -   -   2,540   15,590		_	_	_	596	_	_	_	_	_
Venezuela		_	_	_		_	_	_	_	
Non-OPEC		_	_	_		_	_	_	2.540	2,540
Argentina	. 511024014		_	_	0,720	_	_		2,540	2,040
Argenina	Non-OPEC	1,112	44	_	14,294	<u>-</u>	777	2,840	15,590	19,207
Aruba	Argentina	, –	-	_	_	-	_		_	261
Bahrams		-	-	-	151	-	_	-	-	-
Bahrain	Australia	_	-	_	1	-	_	_	-	_
Belgium		_	_	_	43	_	_	_	_	-
Brazil		-	-	-	-	-	-	-	-	-
Brune		-	-	-	_	-	_	-	_	_
Cameron		-	-	-	13	-	-	-	54	54
Canada		_	ı	_	ı		_	-	_	-
Chad		-	-	_	6.001	_		400	- 6 650	7,151
China   168		_	10	_	,	_			0,036	7,131
Colombia		168		_			_	_	_	
Congo (Brazzaville)		-	_	_		_	240	406	1 274	1,920
Demark		_	_	_	_	_		-		-,020
Egypt         - <td></td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>		_	_	_	-	-	_	_	_	_
Finland		-	_	-	46	_	_	-	-	-
France	Estonia	-	_	-	-	-	-	-	-	_
Germany		_	_	_	-	_	_	_	_	-
Guatemala		-	_	-	-	-	-	_	-	-
India		-	-	-	-	-	_	-	-	_
Indonesia		-	-	-			-	_	-	_
Italy		_	ı	_	2,447		-	-	1	1
Korea, South         -         -         4,112         -		_	_	_	_		_	_	-	_
Latvia		_		_	/ 112		_	_	_	
Lithuania         -		_		_	7,112	_	_	_		_
Malaysia       -       -       344       -		_	_	_	_	_	_	_	_	_
Mexico         -         -         -         -         -         137         1,234           Netherlands         -         34         -         -         -         -         -         118           Netherlands Antilles         - <td></td> <td>-</td> <td>-</td> <td>-</td> <td>344</td> <td>-</td> <td>_</td> <td>-</td> <td>-</td> <td>_</td>		-	-	-	344	-	_	-	-	_
Netherlands     -     34     -     -     -     -     118       Netherlands Antilles     -     -     -     -     -     -     -       Norway     -     -     -     -     -     -     -       Oman     -     -     -     -     -     -     -     -       Portugal     -     -     -     -     -     -     -     -       Russia     -     -     -     -     -     -     -     -       Syain     -     -     -     -     -     -     -     -     -       Sweden     - </td <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>137</td> <td>1,234</td> <td>1,371</td>		_	_	_	_	_	-	137	1,234	1,371
Norway         - <td></td> <td>-</td> <td>34</td> <td>_</td> <td>-</td> <td></td> <td>_</td> <td>-</td> <td>118</td> <td>118</td>		-	34	_	-		_	-	118	118
Oman         -		-	-	_	-	-	-	-	-	-
Portugal         -<	,	-	_	_	-	_	_	_	_	_
Russia     -     -     276     -     256     460     1,864       Spain     -     -     -     -     -     -     -       Sweden     -     -     -     -     -     -     -       Syria     -     -     -     -     -     -     -       Trinidad and Tobago     -     -     -     -     -     -     -       United Kingdom     -     -     -     -     -     -     -       Vietnam     -     -     -     -     -     -     -       Vietnam     -     -     -     -     -     -     -       Yemen     -     -     -     -     -     -     -       Other     944     0     -     513     -     196     847     379		_	_	-	-	_	-	_	-	-
Spain     -		_	_	_	- 070	_	-	-	1 00 1	- 0.500
Sweden     -     -     -     -     -     270       Syria     -     -     -     -     -     -     -       Trinidad and Tobago     -     -     -     -     -     -     -     -       United Kingdom     -     -     -     -     -     -     -     -     -       Vietnam     -     -     -     -     -     -     -     -       Virgin Islands, U.S.     -     -     -     -     -     -     -       Yemen     -     -     -     -     -     -     -     -       Other     944     0     -     513     -     196     847     379		_	_	_	2/6	_	256	460	1,864	2,580
Syria     -		_	_	_	_	_	_	_	270	270
Trinidad and Tobago     -     -     -     -     -     321     3,738       United Kingdom     -     -     -     -     -     -     -       Vietnam     -     -     -     -     -     -     -       Virgin Islands, U.S     -     -     -     -     -     -       Yemen     -     -     -     -     -     -     -       Other     944     0     -     513     -     196     847     379		_	_	_	_	_	_	_	270	
United Kingdom     -		_	_	_	_	_	_	321	3.738	4,059
Vietnam     - <t< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>,556</td></t<>		-	-	-	-	-	-	-		,556
Virgin Islands, U.S.     -     -     -     -     -     -       Yemen     -     -     -     -     -     -     -       Other     944     0     -     513     -     196     847     379		_	_	_	_	_	_	_	_	_
Other		_	-	_	-	_	_	_	_	_
		_		-	_	-	-	_	_	_
Total	Other	944	0	_	513	_	196	847	379	1,422
, , , , , , , , , , , , , , , , , , , ,	Total	1.112	44	_	19.078	_	1.209	3.452	18.130	22,791
Parties Out 3		-,						-,		,
Persian Gulf <sup>3</sup>	Persian Gulto				1,049					

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) - Continued

	Petroch Feeds	nemical stocks									Daily Average	•
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
OPEC	_	_	_	192	1,067	498	_	28,457	210,540	599	94	693
Algeria	_	_	_	_	-	387	_	5,605	21,459	52	18	71
Angola	-	_	-	_	_	_	_	933	26,467	84	3	87
Ecuador	-	_	-	_	-	-	-	10	10	-	0	0
Equatorial Guinea	-	-	-	_	_	_	_	-	-	-	-	-
Gabon	-	-	_	_	_	_	_	-	-	-	-	_
Iran	-	-	_	-	-	_	-	_		- 67	_ 0	-
Iraq	_	_	_	_	_	_	_	3 181	20,438 181	67	1	67 1
Kuwait Libya	_	_	_	_	_	_	_	697	12,249	38	2	40
Nigeria		_		_		_	_	6,835	87,368	265	22	287
Qatar	_	_	_	_	_	15	_	15	15		0	0
Saudi Arabia	_	_	_	_	_	_	_	586	23,395	75	2	77
United Arab Emirates	_	_	-	_	-	96	-	375	375	-	1	1
Venezuela	-	-	-	192	1,067	-	-	13,217	18,583	18	43	61
				_								
Non-OPEC	9	_	742	24	7,070	1,717	_	272,474	377,232	345	896	1,241
Argentina	_	-	_	_	-	8	-	5,473	5,473	-	18	18
Aruba	_	_	-	_	_	_	_	151	151	_	0	0
Australia	_	_	_	_	- 66	_	_	228	228	_	1	1
Bahrain				_	_	_	_	220	220			
Belgium	_	_	_	_	_	74	_	4,567	4,567	_	15	15
Brazil	_	_	63	_	_		_	543	10,699	33	2	35
Brunei	_	_	-	_	_	_	_		-	-	_	-
Cameroon	_	_	_	_	-	-	_	_	_	_	-	_
Canada	-	-	510	6	5,638	1,092	_	113,340	173,003	196	373	569
Chad	_	_	_	_	-	_	_	6	1,909	6	0	6
China	-	-	125	_	_	_	_	559	559	-	2	2
Colombia	_	-	-	_	_	_	_	4,299	15,666	37	14	52
Congo (Brazzaville)	-	-	_	-	_	-	_	205	1,156	3	1	4
Denmark	_	_	_	_	_	_	_	351 305	1,581	4 5	1	5
Egypt Estonia	_	_	_	_	_	_	_	305	1,792	5	1 0	6
Finland	_	_	_	_	_	_	_	2,592	2,592	_	9	9
France	_	_	_	_	_	57	_	8,078	8,078	_	27	27
Germany	-	-	16	-	1	98	_	735	735	_	2	2
Guatemala	_	-	_	-	-	-	_	_	_	-	-	-
India	_	_	-	_	_	_	_	21,177	21,177	_	70	70
Indonesia	_	-	_	_	_	_	_	_	_	-	_	_
Italy	-	_	-	_	-	16	_	3,580	3,580	_	12	12
Korea, South	_	-	3	-	_	316	_	5,892	5,892	-	19	19
Latvia Lithuania	_	_	_	_	_	_	_	495	495	_	2	_ 2
Malaysia	_	_	6	_	_	_	_	600	600	_	2	2
Mexico	_		_	_	_	_	_	1,471	3,310	6	5	11
Netherlands	_	_	1	_	_	-	_	9,827	9,827	_	32	32
Netherlands Antilles	_	_	_	_	-	-	-	_	_	_	-	-
Norway	_	-	-	-	-	-	-	4,662	16,066	38	15	53
Oman	_	-	-	_	-	-	_	_		-	_	
Portugal	-	_	_	_	-	_	_	7,906	7,906		26	26
Russia	_	_	_	_		34	_	21,203	23,313	7	70	77
SpainSweden	_	_	8	_	1,213	15	-	12,556	12,556	_	41	41
Syria	_	_	-	_	_	15	_	2,991	2,991	_	10	10
Trinidad and Tobago	_	_	_	_	_	_	_	4,892	4,892		16	16
United Kingdom	9	_	_	_	_	4	_	25,530	26,175	2	84	86
Vietnam	-	-	_	_	-	-	-		-		-	-
Virgin Islands, U.S	-	_	_	-	-	-	_	-	_	-	-	-
Yemen	-	-	_	-	_	-	-	_	_	_	-	-
Other	0	-	10	18	152	3	-	8,259	10,262	8	26	33
Total	9	_	742	216	8,137	2,215	_	300,931	587,772	944	990	1,933
Porcion Gulf3						444		4 460	44 404	140		140
Persian Gulf <sup>3</sup>	_	-	_	_	_	111	_	1,160	44,404	142	4	146

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Note: Totals may not equal sum of components due to independent rounding.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gaso	line Blending C	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	9,403	_	_	_	_	_	_	_	_	_
Algeria	9,403	_	_	_	_	_	_	_	_	_
Angola	_	-	_	_	_	_	_	_	_	
Ecuador	-	-	-	-	-	-	-	-	-	
Equatorial Guinea	-	-	-	-	_	_	-	-	-	
Gabon	-	-	_	-	-	-	_	-	-	
Iran	_	-	_	_	_	_	_	_	_	
Iraq Kuwait	_	_	_	_	_	_	_	_	_	
Libya	_	_	_	_	_	_	_	_	_	
Nigeria	_	-	_	_	_	_	_	_	_	
Qatar	_	-	_	_	_	-	-	-	-	
Saudi Arabia	9,352	-	_	-	_	_	_	-	_	
United Arab Emirates	-	-	-	-	-	-	-	-	_	
Venezuela	51	-	_	-	_	-	_	_	-	
Non-OPEC	708,721	20,008	4,252	_	_	_	_	258	2,589	2,84
Argentina	_	_	_	_	_	_	_	_	_	
Australia	_	_	_	_	_	_	_	_	_	
Bahamas	-	-	_	-	_	_	_	-	-	
Bahrain	_	-	_	_	-	-	-	-	-	
Belgium	_	_	_	_	_	-	_	_	_	
Brazil	-	-	_	-	_	-	-	-	-	
Brunei	-	-	-	-	-	-	_	-	-	
Cameroon	707 700		4.050	-	_	-	_	-	0.500	0.04
Canada Chad	707,723	20,008	4,252	_	_	_	_	258	2,589	2,84
China	_	_	_	_	_	_	_	_	_	
Colombia	_	_	_	_	_	_	_	_	_	
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	
Denmark	-	-	_	-	-	-	-	-	-	
Egypt	-	-	_	-	_	-	-	_	-	
Estonia	-	-	-	-	-	-	-	-	-	
Finland	-	-	_	-	_	_	_	_	-	
France	_		_	_	_	_	_	_		
Guatemala	_	_	_	_	_	_	_	_	_	
India	-	-	-	-	-	-	-	-	-	
Indonesia	_	-	_	_	_	-	-	-	_	
Italy	_	-	_	_	_	_	-	-	_	
Korea, South	-	-	-	-	-	-	_	-	-	
Latvia Lithuania	_	-	_	_	_	_	_	_	_	
Malaysia		_			_	_	_	_	_	
Mexico	998	_	_	_	_	_	_	_	_	
Netherlands	-	-	-	-	-	-	-	-	-	
Netherlands Antilles	_	-	_	_	_	-	_	-	_	
Norway	-	-	_	-	_	_	_	_	_	
Oman	-	_	_	-	_	_	_	_	_	
Portugal	_	-	_	_	_	_	_	_	-	
Russia Spain		_			_	_	_	_	_	
Sweden	_	_	_	_	_	_	_	_	_	
Syria	-	-	-	-	-	-	-	-	-	
Trinidad and Tobago	-	-	_	-	_	-	_	-	_	
United Kingdom	_	_	_	_	_	-	_	_	_	
Vietnam	_	_	_	_	_	-	_	_	_	
Virgin Islands, U.S	_	-	_	_	_	_	_	_	_	
Yemen	0	0	0	_	_	_	_	0		
						_	_			
Total	718,124	20,008	4,252	-	_	-	_	258	2,589	2,84
Persian Gulf <sup>3</sup>	9,352								1	

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

	Oxyge	nates		Renewal	ole Fuels			Di	stillate Fuel (	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC	_	_	_	_	_	_	_	_	_	_	_
AlgeriaAngola	_	_	_	_	_	_	_	_	_	_	_
Ecuador	_	_	_	_	_	_	_	_	_	_	_
Equatorial Guinea	_	_	_	_	_	_	_	_	_	_	_
Gabon	-	_	_	_	_	_	-	_	_	-	_
Iran	_	-	_	_	_	_	_	_	_	-	_
Iraq	_	-	_	_	_	_	_	_	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	_
Libya	-	-	_	_	_	_	-	_	-	-	-
Nigeria Qatar	-	_	_	_	_	_	_	_	_	_	_
Saudi Arabia	_	_	_	_	_	_	_	_	_	_	_
United Arab Emirates			_	_	_	_	_	_	_	_	
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	_	_	_	370	_	_	274	_	12	39	325
Argentina	_	-	_	_	_	_	_	_	_	_	-
Aruba	-	_	-	-	-	-	-	-	-	-	_
Australia	-	_	_	_	_	_	_	_	_	_	_
Bahrain			_	_	_	_	_	_	_	_	
Belgium	_	_	_	_	_	_	_	_	_	_	_
Brazil	_	_	_	_	_	_	_	_	-	_	-
Brunei	-	-	_	_	_	-	-	-	-	-	-
Cameroon	-	-	_	_	_	_	_	-	-	_	-
Canada	-	-	-	370	-	-	274	-	12	39	325
Chad	-	-	_	_	_	_	-	_	-	-	-
ChinaColombia	-		_	_	_	_	_	_	_	_	
Congo (Brazzaville)	_	_	_	_	_	_	_	_	_	_	_
Denmark	_	_	_	_	_	_	_	_	_	_	_
Egypt	-	-	-	_	_	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	_	-	-	-
Finland	-	-	_	_	_	_	_	-	-	_	-
France	-	-	_	_	_	_	_	_	_	-	-
Germany	_	_	_	_	_	_	_	-	_	_	_
GuatemalaIndia	-	_	_	_	_	_	_	_	_	_	_
Indonesia	_		_	_	_	_	_	_	_	_	
Italy	_	_	_	_	_	_	_	_	_	_	_
Korea, South	_	_	_	_	_	_	_	_	-	-	-
Latvia	_	_	_	_	_	_	_	_	_	_	_
Lithuania	-	_	_	-	-	_	_	_	-	_	-
Malaysia	-	_	_	_	_	_	_	_	_	-	
Mexico	-	_	_	_	_	_	_	_	_	-	_
Netherlands Netherlands Antilles	_		_	_	_	_	_	_		_	
Norway	_	_	_	_	_	_	_	_	_	_	_
Oman	-	_	_	_	_	_	_	_	_	_	_
Portugal		_	_	_	_	_	_	_	_	-	_
Russia	-	_	_	-	-	_	-	_	-	_	-
Spain	-		_	_	_	_	_	_	_	_	
Sweden	-	_	_	_	_	_	_	_	_	-	_
Trinidad and Tobago	_	_	_	_	_	_	_	_	_	_	_
United Kingdom	_		_	_	_	_	_	_	_	_	_
Vietnam	_	_	_	_	_	_	_	_	_	_	_
Virgin Islands, U.S	-	-	_	_	_	_	-	_	-	-	_
Yemen	_	_	_	_	_	-	-	_	-	-	-
Other	-	_	_	0	_	_	0	_	0	0	0
Total	_	_	_	370	_	_	274	_	12	39	325
Persian Gulf <sup>3</sup>											

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

							Residual	Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
DPEC				5					
Algeria	_	_	_	5	_	_	_	_	
Angola	_	_	_			_	_		
Ecuador	_	_	_	_	_	_	_	_	
Equatorial Guinea	_	_	_	_	_	_	_	_	
Gabon	_	_	_	_	-	_	_	_	
Iran	-	-	-	-	-	-	-	-	
Iraq	-	-	-	-	-	-	-	-	
Kuwait	-	-	-	_	-	-	_	-	
Libya	-	-	-	_	-	-	-	-	
Nigeria	-	-	-	-	_	-	-	-	
Qatar	-	-	-	-	-	-	-	-	
Saudi Arabia	-	_	_	_	_	-	_	-	
United Arab Emirates Venezuela	-	_	_	_ 5	_	-	_	-	
venezueia	-	_	_	5	_	-	_	-	
lon-OPEC	_	23	_	_	444	_	354	343	(
Argentina	_	_	_	_	-	_	-	-	
Aruba	_	_	-	_	-	_	_	-	
Australia	_	_	_	_	-	_	_	_	
Bahamas	-	-	-	-	-	-	-	-	
Bahrain	-	-	-	_	-	-	-	-	
Belgium	-	-	-	_	-	_	-	-	
Brazil	-	-	-	-	-	-	-	-	
Brunei	-	-	-	-	-	-	_	-	
Cameroon	-	-	-	-	-	-	_	-	
Canada	-	23	-	-	444	-	354	343	6
Chad	-	-	-	-	-	-	-	-	
China	-	_	-	-	_	-	_	-	
Colombia	_	-	-	_	-	-	-	-	
Congo (Brazzaville)	_	-	-	-	_	_	_	-	
Denmark	_	_	_	_		_	_	_	
Estonia	_	_	_	_	_	_	_	_	
Finland	_	_	_	_	_	_	_	_	
France	_	_	_	_	-	_	_	_	
Germany	-	-	-	-	-	-	-	-	
Guatemala	-	-	-	-	-	-	-	-	
India	_	_	ı	-	-	_	_	-	
Indonesia	-	-	-	-	-	-	-	-	
Italy	-	-	-	-	-	-	-	-	
Korea, South	-	-	-	-	-	-	-	-	
Latvia	-	_	-	_	_	_	_	-	
Lithuania	_	-	_	_	-	-	-	-	
Malaysia Mexico	_	_	_	_		-	_	-	
Netherlands	_	_	_	_	_	-	_	_	
Netherlands Antilles	_	_	_	_		_	_	_	
Norway	_	_	_	_	_	_	_	_	
Oman	_	_	_	_	_	_	_	_	
Portugal	-	-	-	-	-	_	-	-	
Russia	_	_	_	_	_	_	_	_	
Spain	-	-	-	-	_	_	-	-	
Sweden	_	_	_	_	-	_	_	_	
Syria	-	-	-	-	_	_	_	-	
Trinidad and Tobago	-	-	_	_	_	-	-	-	
United Kingdom	-	_	-	_	_	-	_	-	
Virgin Islands II S	_	-	_	_	-	-	-	-	
Virgin Islands, U.S	-	-	-	_		-	_	-	
Yemen	_	_ 0	_	0	0	-	0	- 0	
Ou iGi	-	U	-	ا	U	-	U	ا	
otal	_	23	_	5	444	<u>_</u>	354	343	(
		20					554	5.5	•
						1			

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) - Continued

Argentina	759 	Other Oils	Waxes	- - - - - - - - 216	Asphalt and Road Oil	Lubricants  3	Miscellan-eous Products	Total Products  8	Total Crude Oil and Products  9,411	Crude Oil  31	Products  0	Total  31
Algeria	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 	4	35,131 				
Algeria	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 	4	35,131 				
Angola	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Ecuador	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Equatorial Guinea Gabon Iran Iran Iraq Kuwait Libya Nigeria Qatar Saudi Arabia United Arab Emirates Venezuela  Non-OPEC Argentina Aruba Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Frinland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Gabon           Iran           Iraq           Kuwait           Libya           Nigeria           Qatar           Saudi Arabia           United Arab Emirates           Venezuela           Non-OPEC           Argentina           Aruba           Australia           Bahamas           Bahrain           Belgium           Brazil           Brunei           Cameroon           Canada           Chad           China           Colombia           Coongo (Brazzaville)           Denmark           Egypt           Estonia           Finland           France           Germany           Guatemala           India           Indonesia           Italy           Korea, South           Latvia           Lithuania           Malaysia           Meterlands           Notherlands           Notherlands           Norway	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Iraq	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Kuwait Libya Nigeria Qatar Saudi Arabia United Arab Emirates Venezuela  Non-OPEC Argentina Aruba Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Libya	- - - - -	- - - - - - -	- - - - - - -		2,340 - - 2,340 - - - - - - -	1,948 - - - - - - - - - -	4	35,131 - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Nigeria         Qatar           Saudi Arabia         United Arab Emirates           Venezuela         Venezuela           Non-OPEC         Argentina           Aruba         Australia           Bahamas         Baharain           Belgium         Brazil           Brunei         Cameroon           Canada         Chad           China         Colombia           Congo (Brazzaville)         Denmark           Egypt         Estonia           Finland         France           Germany         Guatemala           India         India           Indonesia         Italy           Korea, South         Latvia           Lithuania         Malaysia           Mexico         Netherlands           Netherlands         Netherlands           Norway         Norway	- - - - -	- - - - - - -	- - - - - - -	- - - 225 - - - - - - - - - - - - - - -	- - - - - - -	1,948 - - - - - - - - - -	- - - - - - -	35,131 - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Qatar	- - - - -	- - - - - - -	- - - - - - -	- - - 225 - - - - - - - - - - - - - - -	- - - - - - -	1,948 - - - - - - - - - -	- - - - - - -	35,131 - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
Saudi Arabia United Arab Emirates Venezuela  Non-OPEC Argentina Aruba Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - - -	- - - - - - -	- - - - - - -	- - - 225 - - - - - - - - - - - - - - -	- - - - - - -	1,948 - - - - - - - - - -	- - - - - - -	35,131 - - - - - - - - -	9,352 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - 116	31 - 0 2,447
United Arab Emirates Venezuela  Non-OPEC  Argentina Aruba Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - - -	- - - - - - -	- - - - - - -	- - 225 - - - - - - - - - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -	35,131 - - - - - - - - -	743,852 	- 0 <b>2,331</b> - - - - - - -	- 0 116 - - - - - - - - - - 116	- 0 2,447 - - - - - - - - -
Venezuela	- - - - -	- - - - - - -	- - - - - - -	- 225 - - - - - - - - - 216	- - - - - - -	- - - - - - -	- - - - - - -	35,131 - - - - - - - - -	743,852 - - - - - - - - -	2,331 - - - - - - - - -	116 	2,447 - - - - - - - - -
Non-OPEC Argentina Aruba Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - - -	- - - - - - -	- - - - - - -	- - - - - - - - 216	- - - - - - -	- - - - - - -	- - - - - - -	35,131 - - - - - - - - -	743,852 - - - - - - - - -	2,331 - - - - - - - - -	116 	2,447 - - - - - - - - -
Argentina Aruba Aruba  Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	- - - - -	- - - - - - -	- - - - - - -	- - - - - - - - 216	- - - - - - -	- - - - - - -	- - - - - - -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	- - - - - - -	- - - - - - - - 116	- - - - - - - -
Argentina Aruba  Aruba  Australia  Bahamas  Bahrain  Belgium  Brazil  Brunei  Cameroon  Canada  Chad  China  Colombia  Congo (Brazzaville)  Denmark  Egypt  Estonia  Finland  France  Germany  Guatemala  India  Indonesia  Italy  Korea, South  Latvia  Lithuania  Malaysia  Mexico  Netherlands  Norway	- - - - -	- - - - - - -	- - - - - - -	- - - - - - - - 216	- - - - - - -	- - - - - - -	- - - - - - -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	- - - - - - -	- - - - - - - - 116	- - - - - - - -
Aruba Australia Bahamas Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Frinland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - -	- - - - -	- - - - - - - - - 58		- - - - - - - 2,340	- - - - - - - - 1,945	- - - - - - - - 4	- - - - - - - 35,119	- - - - - - - 742,842	2,328	- - - - - - - 116	- - - - - - 2,444 -
Australia	- - - -	- - - - -	- - - - - - - 58			- - - - - - 1,945		- - - - - - 35,119	- - - - - - - 742,842	- - - - - 2,328	- - - - - - - 116	- - - - - 2,444 - -
Bahamas Bahrain Belgium Brazil Brunei Cameroon China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	- - - -	- - - - - - 721	- - - - - - 58	- - - - - 216		- - - - - 1,945	- - - - - - 4	- - - - - - 35,119	- - - - - - 742,842	_ _ _ _ _ _ 2,328 _ _	- 116	2,444 
Bahrain Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - - 759	- - - - 721	- - - - - 58	- - - 216	     2,340 	- - - - 1,945	- - - - - 4	- - - - 35,119	- - - - 742,842	     2,328 	- 116	- - - - 2,444 - -
Belgium Brazil Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- - - 759	- - - 721	- - - - 58	- - - 216	2,340 -	- - - 1,945	- - - 4	- - - - 35,119	- - - 742,842 -	- - - 2,328 -	- 116	_ _ _ _ 2,444 _ _
Brazil	- - - 759	- - 721	- - - 58	216 –	2,340 –	- - 1,945 -	- - - 4	- - - 35,119 -	- - 742,842 -	_ _ _ 2,328 _ _	- 116	- - 2,444 - -
Brunei Cameroon Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- 759	- - 721 -	- - 58 -	216 –	2,340 -	- 1,945 -	- - 4 -	- - 35,119 -	- - 742,842 -	- 2,328 - -	- 116	- 2,444 - -
Canada Chad China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Norway	- 759	721 -	58 -	-	2,340 - -	1,945 –	- 4 -	35,119 –	742,842 -	2,328 - -		2,444 - -
Chad	759	721 -	58 -	-	2,340 - -	1,945 –	4 –	35,119 -	742,842 -	2,328 - -		2,444 - - -
China Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway		-	-	-	_	-	-	_	-	_ _	_ _	_ _ _
Colombia Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	-		l		l –					_	-	_
Congo (Brazzaville) Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	-	_	-	_		_	_	_	_			_
Denmark Egypt Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	-	-	-	_	_	-	-	_	_	_	-	
Egypt	_	_	_	_	_	-	_	-	-	-	-	_
Estonia Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	-	_	_	-	_	_	_	_	-	_	-	_
Finland France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	_	_	_	-	_	-	-	-	-	-	-	
France Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway	_	_	_	-	_	_	_	_	-	_	-	_
Germany Guatemala India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Netherlands Antilles Norway		_	_	_	_	_	_	_	-	_	_	
Guatemala		_	_	1	_	1	_	2	2	_	0	0
India Indonesia Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Antilles Norway			_	_	_	· ·	_	_	_	_	-	-
Indonesia	_	_	_	_	_	_	_	_	_	_	_	
Italy Korea, South Latvia Lithuania Malaysia Mexico Netherlands Netherlands Antilles Norway	_	_	_	_	_	_	_	_	_	_	_	_
Korea, South	_	_	_	_	_	_	_	_	_	_	_	_
Latvia Lithuania Malaysia Mexico Netherlands Netherlands Antilles Norway	_	_	_	_	_	1	_	1	1	_	0	0
Lithuania	_	-	-	-	-	_	_	-	-	-	_	-
Mexico	-	_	-	_	-	-	-	-	_	-	_	_
Netherlands	_	_	_	_	_	_	_	_	_	_	-	-
Netherlands Antilles Norway	_	_	-	-	_	_	-	-	998	3	-	3
Norway	_	_	_	_	_	_	_	_	-	_	_	
	_	_	-	_	_	_	-	_	_	_	-	-
	_	-	_	_	-	-	-	-	-	_	-	
Oman	_	_	_	-	_	_	_	_	-	_	-	-
Portugal	_	_	-		_	-	-	-	-	_	-	
Russia	_	_	_	_	_	_	_	_	_	_	_	_
SpainSweden	_	_	_		_	1	_	9	9	_	0	0
Syria	_	_	_	-	_		_	9	9			
Trinidad and Tobago	_	_	_	_	_	_	_	_	_	_	_	_
United Kingdom	-	_	_	-	_	_	_	_	-	_	_	_
Vietnam	- - -	_	-	_	_	-	-	_	_	_	-	_
Virgin Islands, U.S	- - -	_	_	-	_	_	-	-	-	-	-	-
Yemen		_	_	_	_	-	-	_	-	_	-	-
Other	-		0		0	0	0	0	0	0	0	0
Total	-	0			2,340	1,951	4	35,139	753,263	2,362	116	2,478
Persian Gulf <sup>3</sup>	- - -	721	58	225	_,0-10				. '		0	31

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Note: Totals may not equal sum of components due to independent rounding.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	ine Blending Co	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	567,483	199	_	31,568	_	_	_	_	289	289
Algeria	7,133	-	_	25,634	_	_	_	_	_	_
Angola	5,483	-	-	740	-	-	-	-	-	-
Ecuador	3,809	-	-	-	-	-	-	-	-	-
Equatorial Guinea	2,281	-	_	_	_	-	_	_	_	_
Gabon	1,581	-	-	641	-	-	-	-	-	-
Iran	_	-	-	_	-	_	-	-	-	_
Iraq	140,182	-	-	1,123	-	-	-	-	-	-
Kuwait	26,276	-	-	- 007	-	_	-	-	-	_
Libya	1,239	-	_	997	-	_	_	-	-	_
Nigeria Qatar	7,737	-	_	730	_	_	_	_	-	_
Saudi Arabia	179,592	_	_	501	_	_	_			
United Arab Emirates	540	_	_	591	_	_	_	_	_	
Venezuela	191,630	199	_	611			_		289	289
7011024014	131,000	133	_	011	-	_		-	203	209
Non-OPEC	388,279	2,534	1,261	100,813	_	1,187	1,187	_	13,324	13,324
Argentina	_	-	_	106	-	-	-	-	810	810
Aruba	_	-	_	_	-	-	-	-	-	-
Australia	_	-	-	_	-	-	-	-	-	-
Bahamas	-	-	-	36	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	43	9,816	-	_	-	-	904	904
Brazil	36,136	-	-	897	-	-	-	-	368	368
Brunei	_	-	_	-	-	_	-	_	_	_
Cameroon	116 006	14	_	219	-	_	-	-	71	- 71
Canada	116,836 4,248	14	_	220	_	_	_	_	71	71
China	4,240	_	_	_	_		_	_	_	_
Colombia	52,029		_	415	_		_		228	228
Congo (Brazzaville)	02,025	_	_	-10	_	_	_	_		
Denmark	_	_	_	982	_	_	_	_	_	_
Egypt	447	-	_	-	-	_	-	_	-	_
Estonia	-	-	_	-	-	-	-	-	-	-
Finland	-	-	_	126	-	308	308	-	-	-
France	_	-	-	1,640	-	-	-	_	437	437
Germany	_	-	_	484	_	91	91	-	-	_
Guatemala	2,956	-	-	_	-	-	-	-	-	-
India	-	-	_	2,958	-	-	-	-	2,126	2,126
Indonesia	-	-	-	-	-	-	-	-	-	_
Italy	-	-	-	891	-	_	-	-	626	626
Korea, South	_	-	-	_	-	-	_	-	-	-
Latvia Lithuania	_	-	_	103	_	_	_	_	643	643
Malaysia	_	_	_	103	_	_	_		043	040
Mexico	163,077	1,171	235	109		116	116		1,503	1,503
Netherlands	100,077	- 1,171	200	4,960	_	47	47	_	1,661	1,661
Netherlands Antilles	_	_	_	-	_	-	-	_	-	- 1,001
Norway	1,496	396	-	6,746	-	-	-	-	22	22
Oman	,	_	_		_	_	_	_	_	_
Portugal	_	-	-	-	-	_	-	-	279	279
Russia	_	_	_	59,985	_	22	22	_	306	306
Spain	-	-	_	1,385	-	-	_	-	1,339	1,339
Sweden	_	-	_	601	_	_	-	-	-	-
Syria	-	-	-	-	-	_	-	-	-	
Trinidad and Tobago	1,112	-	_	711	_	_	-	-	270	270
United Kingdom	5,847	233	_	936	_	20	20	-	680	680
Vietnam	-	-	-	-	-	_	_	-	-	-
Virgin Islands, U.S	-	-	_	-	_	_	-	-	-	_
Yemen Other	2,514	720	983	5,846	_	583	583	_	1,051	- 1,051
Guiei	2,314	720	903	5,040	-	563	363	-	1,001	1,051
Total	955,762	2,733	1,261	132,381	-	1,187	1,187	-	13,613	13,613
							1			

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

	Oxyge	enates		Renewal	ole Fuels			Di	istillate Fuel (	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
ODEC									101		101
OPEC		_	_	_	_	_	_	_	101	_	101
Angola	_	_	_	_	_	_	_	_	_	_	_
Ecuador	_	_	_	_	_	_	_	_	_	_	-
Equatorial Guinea	-	_	_	_	_	_	-	_	_	-	-
Gabon	-	_	_	_	_	_	_	_	-	-	_
IranIraq	-	_	_	_	_	_	-	_	_	-	_
Kuwait		_	_	_	_	_	_	_	_	_	_
Libya	_	_	_	_	_	_	_	_	_	_	_
Nigeria	-	-	_	-	_	-	-	_	_	-	-
Qatar	_	-	-	-	-	-	_	_	_	_	-
Saudi Arabia	-	_	_	_	_	_	-	_	_	-	-
United Arab Emirates	-	_	_	_	_	_	_	_	_	-	_
Venezuela	-	_	_	_	_	_	_	_	101	-	101
Non-OPEC	1,873	1,330		1,716					1,938	864	2,802
Argentina	215	1,330	_	1,716	_	_	_	_	1,936	004	2,002
Aruba	_	_	_	1,710	_	_	_	_	_	_	_
Australia	_	_	_	_	_	_	_	_	_	_	_
Bahamas	-	-	_	-	-	-	-	-	_	-	-
Bahrain	_	-	-	-	-	-	_	_	_	-	-
Belgium	234	_	-	-	-	-	-	-	422	260	682
Brazil	431	1,330	_	_	_	_	_	_	555	-	555
Brunei	-	_	_	_	_	_	-	_	_	-	_
Cameroon		_	_	_	_	_	_	_	_	_	_
Chad	_	_	_	_	_	_	_	_	_		
China	_	_	_	_	_	_	_	_	_	_	_
Colombia	_	_	_	_	_	_	_	_	_	_	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	_	-	-
Denmark	-	-	_	_	_	_	-	_	-	-	-
Egypt	-	-	_	-	_	_	-	-	-	-	_
Estonia	-	_	_	_	_	_	_	_	-	-	-
Finland	-	_	_	_	_	_	_	_	_	115	115
Germany	161	_	_	_	_	_	_	_	_	115	- 115
Guatemala	-	_	_	_	_	_	_	_	_	_	_
India	-	_	_	_	_	_	_	_	100	114	214
Indonesia	-	-	_	-	-	-	_	_	_	_	-
Italy	-	_	_	_	_	_	_	_	_	-	_
Korea, South	-	_	_	_	_	_	_	_	_	-	-
Latvia	_	_	_	_	_	_	_	_	_	-	
Lithuania	-	_	_	_	_	_	_	_	_	_	_
Malaysia Mexico	_	_	_	_	_	_	_	_	_	_	
Netherlands	766	_	_	_	_	_	_	_	44	_	44
Netherlands Antilles	-	_	_	_	_	_	_	_	-	_	-
Norway		_	_	_	_	_	_	_	_	_	
Oman	_	_	_	_	_	_	_	_	-	_	_
Portugal	-	-	_	_	_	_	-	_	_	_	_
Russia	_	_	_	_	_	_	_	_	612 12	375	987
Spain Sweden	_	_	_	_	_	_	_	_	12	_	12 19
Syria		_	_	_	_	_	_	_	19	_	- 19
Trinidad and Tobago	_	_	_	_	_	_	_	_	_	_	_
United Kingdom	66	-	-	-	-	-	-	-	4	-	4
Vietnam	-	-	-	-	-	-	-	-	-	_	_
Virgin Islands, U.S	-	_	_	_	_	_	_	_	_	-	
Yemen	_	_	_	_	_	_	_	_	-	_	-
Other	0	0	_	0	_	_	_	_	170	0	170
Total	1,873	1,330	_	1,716	_	_	_	_	2,039	864	2,903
Persian Gulf <sup>3</sup>		_	_	_	_	_	_	_		_	_
		_	. –	. –	. –	. –	_	_	. –	_	_

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

							Residua	l Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	_	_	_	_	37	575	_	1,316	1,891
Algeria	_	_	_	_	-	-	_	- 1,0.0	
Angola	-	_	_	_	_	_	_	_	_
Ecuador	_	_	_	_	_	_	_	_	_
Equatorial Guinea	-	_	_	_	-	-	_	-	_
Gabon	-	_	-	_	-	-	-	-	_
Iran	-	-	-	-	-	-	-	-	-
Iraq	-	_	-	-	-	-	-	-	_
Kuwait	-	1	1	-	_	-	_	_	_
Libya	-	-	-	-	-	-	-	-	-
Nigeria	-	_	_	_	_	_	-	_	-
Qatar	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	_	-	37	-	-	-	_
United Arab Emirates	_	_	_	_	_		_	-	
Venezuela	-	_	_	_	-	575	_	1,316	1,891
								4-044	40.000
Non-OPEC	_	-	-	-	3,803	1,759	1,423	15,044	18,226
Argentina	-	_	-	-	_	456	_	-	456
Aruba Australia	_	-	_	-	_	_	_	_	_
Bahamas	_	_	_	_	_	_	_	_	_
Bahrain		_	_		_	_		_	
Belgium	_				17	_		112	112
Brazil	_	_		_	161	_	298	-	298
Brunei	_	_	_	_	-	_		_	_
Cameroon	_	_	_	_	_	_	_	_	_
Canada	-	_	_	-	1,017	150	_	-	150
Chad	_	_	_	-	_	_	_	_	_
China	-	-	-	_	-	-	-	-	_
Colombia	-	_	_	_	-	-	311	-	311
Congo (Brazzaville)	-	-	-	-	-	_	_	-	-
Denmark	-	-	-	-	-	-	-	-	-
Egypt	-	_	_	-	_	-	-	-	-
Estonia	-	-	-	-	-	-	-	_	-
Finland	-	-	-	-	_	-	-	_	_
France	-	-	-	-	41	-	-	272	272
Germany	-	-	-	-	57	-	_	1	1
Guatemala	-	-	-	-	-	_	-	470	-
India	-	-	-	1	_	-	81	170	251
Indonesia	_	_	_	_	37	_	_	_	_
Italy Korea, South	_	_	_	-	866	_	_	_	_
Latvia	_	_	_	_	000	_	_	_	_
Lithuania	_	_	_	_	_	_		_	
Malaysia		_	_	_	_	_		_	_
Mexico	_	_	_	_	334	502	302	11,974	12,778
Netherlands	_	_	_	-	65	_	-	402	402
Netherlands Antilles	_	_	_	_	_	_	_	-	-
Norway	-	-	-	-	_	-	_	-	-
Oman	_	_	_	_	_	_	_	_	_
Portugal	-	-	-	-	14	_	_	_	_
Russia	-	_	_	-	-	651	22	2,106	2,779
Spain	-	-	_	_	_	_	_	_	_
Sweden	_	_	_	_	-	_	_	4	4
Syria	-	_	_	-	_	_	-	_	-
Trinidad and Tobago	-	_	-	_	-	-	-	-	-
United Kingdom	-	_	_	-	-	-	-	3	3
Vietnam	-	_	_	-	-	-	-	-	-
Virgin Islands, U.S	-	_	_	_	_	_	_	_	_
Yemen	-	_	_	_	-	_	_	_	_
Other	-	_	_	_	1,194	0	409	0	409
Total					2 040	9 994	1 400	16 260	20 117
Total	-	_	_	_	3,840	2,334	1,423	16,360	20,117
Persian Gulf3					97				
Persian Gulf <sup>3</sup>	-	_	-	_	37	_	_	_	

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) - Continued

Country of Origin		hemical stocks								Daily Average	
Algeria	Waxes	I I	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Algeria	_	_	_	_	1,769	_	36,180	603,663	1,867	119	1,986
Angola	-	-	_	_	_	_	25,960	33,093	23	85	109
Equatorial Guinea         -	-	-	_	_	_	_	740	6,223	18	2	20
Gabon	-	-	_	-	_	-	-	3,809	13	_	13
Iraq	-	_	-	_	_	_	-	2,281	8	_	8
Iraq	-	-	_	_	_	_	641	2,222	5	2	7
Kuwait         — <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>1,123</td> <td>141,305</td> <td>461</td> <td>4</td> <td>465</td>	_	_	_	_	_	_	1,123	141,305	461	4	465
Libya	_	_	_	_	_	_	1,120	26,276	86	_	86
Nigeria         — </td <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>997</td> <td>2,236</td> <td>4</td> <td>3</td> <td>7</td>	-	_	_	_	_	_	997	2,236	4	3	7
Qatar         - <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>730</td> <td>8,467</td> <td>25</td> <td>2</td> <td>28</td>	-	_	_	_	_	_	730	8,467	25	2	28
United Arab Emirates         -	-	-	-	_	1,372	-	1,372	1,372	_	5	5
Venezuela         -           Non-OPEC         8,449         3,345           Argentina         -         310           Aruba         -         -           Australia         -         -           Bahamas         -         -           Bahrain         -         -           Canada         -         -           Chad         -         -           Chad         -         -           Chad         -         -	-	_	_	_	22	_	560	180,152	591	2	593
Non-OPEC         8,449         3,345           Argentina         -         310           Arustralia         -         -           Bahamas         -         -           Bahrain         -         -           Belgium         2         -           Berazil         -         -           Brunei         -         -           Cameroon         -         -           Canada         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -	-	-	-	-	375	_	966	1,506	2	3	5
Argentina         -         310           Aruba         -         -           Australia         -         -           Bahamas         -         -           Bahrain         -         -           Belgium         2         -           Brazil         -         -           Brunei         -         -           Cameroon         -         -           Canada         -         -           Chad         -         -           China         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -         -           Estonia         -         -         -           Estonia         -         -         -           Fran	-	-	_	_	_	_	3,091	194,721	630	10	641
Argentina         -         310           Aruba         -         -           Bahamas         -         -           Bahrain         -         -           Belgium         2         -           Brazil         -         -           Brunei         -         -           Cameroon         -         -           Canada         -         -           Chad         -         -           China         -         -           China         -         -           China         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Estonia         -         -           Estonia         -         -           Estonia         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Italy         14         - </td <td>298</td> <td>3 345</td> <td>2,166</td> <td>_</td> <td>5,902</td> <td>20</td> <td>169,147</td> <td>557,426</td> <td>1,277</td> <td>556</td> <td>1,834</td>	298	3 345	2,166	_	5,902	20	169,147	557,426	1,277	556	1,834
Aruba	-		1,061	_	10	_	4,684	4,684		15	15
Australia         -	-	_	_	_	_	-	_	_	_	_	_
Bahrain         - </td <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>_</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	-	-	-	-	-	_	-	-	-	-	-
Belgium         2         -           Brazil         -         -           Brunei         -         -           Cameroon         -         -           Cameroon         -         -           Canada         -         -           China         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Lithuania         -         -           Mexico         2,898	-	_	-	-	_	_	36	36	-	0	0
Brazil         -         -           Brunei         -         -           Cameroon         -         -           Canada         -         -           Chia         -         -           China         -         -           China         -         -           Cologo (Brazzaville)         -         -           Congo (Brazzaville)         -         -           Denmark         -         -         -           Egypt         -         -         -           Estonia         -         -         -           Finland         -         -         -           France         44         188         -           Germany         15         -         -           Guatemala         -         -         -           India         -         -         -           India         -         -         -           India         -         -         -           Italy         14         -         -           Korea, South         -         -         -           Latvia         -         -	-	-	_	_	665	_	665	665	_	2	2
Brunei	-	-	-	_	45	_	11,855	11,855	-	39	39
Cameroon         -         -           Canada         -         -           Chad         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Lithuania         -         -           Mexico         2,898         -<	-	-	145	_	23	_	4,223	40,359	119	14	133
Canada         -         -           Chad         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Latvia         -         -           Latvia         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Norway         -         2,663           Oman         -         -           Norway         -		_	_	_	_	_	219	219		1	1
Chad         -         -           China         -         -           Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Latvia         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167 </td <td>_</td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>1,472</td> <td>118,308</td> <td>384</td> <td>5</td> <td>389</td>	_	-	_	_	_	_	1,472	118,308	384	5	389
Colombia         1,770         -           Congo (Brazzaville)         -         -           Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Latvia         -         -           Lithuania         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands         151         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia	_	-	_	_	_	-	,	4,248	14	_	14
Congo (Brazzaville)         -         -           Denmark         -         -           Estonia         -         -           Fishland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Latvia         -         -           Lithuania         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands         151         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago </td <td>100</td> <td>-</td> <td>114</td> <td>_</td> <td>-</td> <td>-</td> <td>214</td> <td>214</td> <td>-</td> <td>1</td> <td>1</td>	100	-	114	_	-	-	214	214	-	1	1
Denmark         -         -           Egypt         -         -           Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Lithuania         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom </td <td>-</td> <td>-</td> <td>202</td> <td>-</td> <td>_</td> <td>_</td> <td>2,986</td> <td>55,015</td> <td>171</td> <td>10</td> <td>181</td>	-	-	202	-	_	_	2,986	55,015	171	10	181
Egypt         - <td>-</td> <td></td> <td>-</td> <td>_</td> <td>-</td> <td>-</td> <td>_</td> <td>-</td> <td>_</td> <td>_</td> <td>_</td>	-		-	_	-	-	_	-	_	_	_
Estonia         -         -           Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Latvia         -         -           Lithuania         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom	-	-	_	_	-	-	982	982	-	3	3
Finland         -         -           France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Latvia         -         -           Lithuania         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom         459         -           Vietn		_	171	_	_	_	171	447 171	1	1	1
France         44         188           Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Lithuania         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom         459         -           Vietnam         -         -           Virgin Islands, U.S         -         -           Yemen         -         -	_	_	- ',	_	82	_	516	516	_	2	2
Germany         15         -           Guatemala         -         -           India         -         -           Indonesia         -         -           Italy         14         -           Korea, South         -         -           Latvia         -         -           Lithuania         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom         459         -           Vietnam         -         -           Virgin Islands, U.S         -         -           Yemen         -         -	-	188	_	_	95	_	2,832	2,832	-	9	9
India	-	-	-	_	224	-	1,041	1,041	-	3	3
Indonesia	-	-	-	-	_	-	-	2,956	10	-	10
Italy	-	-	_	_		-	5,549	5,549	_	18	18
Korea, South         -         -           Latvia         -         -           Lithuania         -         -           Malaysia         -         -           Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom         459         -           Vietnam         -         -           Virgin Islands, U.S         -         -           Yemen         -         -	-	-	_	_	636	-	636	636	-	2	2
Latvia	8		_	_	169 3,584	_	1,756 4,450	1,756 4,450		6 15	6 15
Lithuania       -       -         Malaysia       -       -         Mexico       2,898       -         Netherlands       151       -         Netherlands Antilles       -       -         Norway       -       2,663         Oman       -       -         Portugal       -       -         Russia       167       -         Spain       -       -         Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -	_	_	_	_	3,364	_	4,450	4,450		15	-
Malaysia       -       -         Mexico       2,888       -         Netherlands       151       -         Netherlands Antilles       -       -         Norway       -       2,663         Oman       -       -         Portugal       -       -         Russia       167       -         Spain       -       -         Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -       -	_	_	_	_	_	_	746	746	_	2	2
Mexico         2,898         -           Netherlands         151         -           Netherlands Antilles         -         -           Norway         -         2,663           Oman         -         -           Portugal         -         -           Russia         167         -           Spain         -         -           Sweden         -         -           Syria         -         -           Trinidad and Tobago         -         -           United Kingdom         459         -           Vietnam         -         -           Virgin Islands, U.S         -         -           Yemen         -         -	131	-	-	_	44	-	175	175	-	1	1
Netherlands Antilles       -	-	-	-	_	-	-	19,144	182,221	536	63	599
Norway       -       2,663         Oman       -       -         Portugal       -       -         Russia       167       -         Spain       -       -         Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -	-	_	_	-	-	20	8,160	8,160	-	27	27
Oman       -       -         Portugal       -       -         Russia       167       -         Spain       -       -         Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -	-		-	_	-	-	- 0.007	- 11.000	_	_	-
Portugal	-	2,663	_	-	- 65	_	9,827 65	11,323 65	5	32	37 0
Russia       167       -         Spain       -       -         Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -	_		_ _	_	- 05	_	293	293	_	1	1
Spain       -       -         Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -	_	_	_	_	37	_	64,283	64,283	_	211	211
Sweden       -       -         Syria       -       -         Trinidad and Tobago       -       -         United Kingdom       459       -         Vietnam       -       -         Virgin Islands, U.S       -       -         Yemen       -       -	-	-	-	-	-	-	2,736	2,736	-	9	9
Trinidad and Tobago       —       —         United Kingdom       459       —         Vietnam       —       —         Virgin Islands, U.S       —       —         Yemen       —       —	-	-	-	-	5	_	629	629	_	2	2
United Kingdom       459       –         Vietnam       –       –         Virgin Islands, U.S.       –       –         Yemen       –       –	-	_	-	-	-	_	-	_	-	_	-
Vietnam         –         –           Virgin Islands, U.S.         –         –           Yemen         –         –	-	-	-	_	_	-	981	2,093	4	3	7
Virgin Islands, U.S.         -         -         -           Yemen         -         -         -	-		195	_	152	-	2,748	8,595	19	9	28
Yemen – – –	-	_	-	-	_	-	_	-	-	-	_
		_	_	_	_	_	_	_		_	_
-,	59	184	278	_	66	0	14,432	16,946	9	48	58
Total 8,775 3,345	298		2,166	_	7,671	20	205,327	1,161,089	3,144	675	3,819
Persian Gulf <sup>3</sup> – –					2,434		4,686	351,276	1,140	15	1,156

<sup>- =</sup> No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.
 Includes Bahrain, Iran, Iran, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	ine Blending Co	omponents
Country of Origin	Crude Oil <sup>1,2</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils <sup>1</sup>	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
					PAD D	istrict 4				
OPEC	_	_	_	_	_	_	_	_	_	_
Algeria	-	-	_	-	-	-	_	_	-	_
Angola	-	-	_	_	_	-	_	_	-	-
Ecuador	-	-	_	-	-	-	_	_	-	-
IranIraq	-	-	_	_	_	_	_	_	_	_
Kuwait	_	_	_	_	_	_	_	_	_	_
Libya	-	-	_	_	_	-	_	_	-	_
Nigeria	_	_	_	_	_	_	_	_	_	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia United Arab Emirates	-	-	_	-	_	-	_	-	-	_
Venezuela	_	_	_	_	_	_	_	_	_	_
V011024014										
Non-OPEC	83,524	3,189	_	_	_	_	_	_	345	345
Canada	83,524	3,189	_	-	-	-	-	-	345	345
Other	0	0	_	-	_	-	_	-	0	0
Total	83,524	3,189	_	_	_	_	_	_	345	345
	00,02.	5,155							0.0	
		Т			PAD D	istrict 5				
OPEC	211,199	_	_	8,994	_	_	_	_	_	_
Algeria		-	_	6,071	_	-	_	_	-	_
Angola	8,774	-	_	_	-	-	_	-	-	-
Ecuador	58,002	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	_
Iraq Kuwait	22,095 20,464	-	_	-	-	-	_	_	-	_
Libya	4,170	_	_	685	_	_	_	_	_	_
Nigeria	2,137	-	-	-	_	-	-	-	-	-
Qatar	_	-	-	-	_	-	-	-	-	-
Saudi Arabia	87,617	-	-	-	-	-	-	-	-	-
United Arab Emirates	5,893	-	-	2,238	-	-	-	_	-	-
Venezuela	_	-	_	_	_	_	_	_	_	_
Non-OPEC	162,389	10,160	_	27,363	_	1,152	1,152	268	9,563	9,831
Argentina	-	-	-	-	-	-	-	-	-	_
Aruba	648	-	-	-	-	-	-	-	-	-
Brazil	17,371	_	_	_ 51	_	_	_	_	_	_
Brunei	245	-	_	-	_	-	_	_	-	_
Canada	68,237	9,552	_	1,763	_	650	650	-	4,756	4,756
China	-	-	_	-	-	-	_	-	-	_
Colombia	38,936	-	-	1,080 98	-	-	-	-	218	218
Finland Germany	_	_	_	215	_	_	_	_	24	24
Indonesia	3,868	-	_	-	_	-	_	_	_	
Japan	_	-	_	-	_	-	-	-	608	608
Korea, South	-	-	-	-	-	225	225	-	1,237	1,237
Malaysia	- 0.040	-	_	736	-	-	-	-	53	53
Mexico	9,243	_	_	59	_	43	43	_	643	643
Netherlands Netherlands Antilles	_	_		- 59	_	43	43	_	043	043
Oman	2,957	-	_	_	_	_	_	_	-	_
Papua New Guinea	-	-	_	-	_	-	_	_	-	_
Peru	635	-	_	1,609	_	_	_	_	-	
Singapore Sweden	-	-	_	828 112	_	_	_	_	173	173
Taiwan	_	_		112					719	719
United Kingdom	_	-	_	_	_	25	25	268	957	1,225
Vietnam	453	-	_	-	_	_	_	_	-	-
Virgin Islands, U.S	-	-	_	-	_			_	_	
Other	19,796	608	-	20,812	_	209	209	0	175	175
Total	373,588	10,160	_	36,357	_	1,152	1,152	268	9,563	9,831
Persian Gulf <sup>3</sup>	136,069	ı		2,238		l				

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol - - -	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and	Greater than 15 ppm to 500 ppm	501 to	Greater than 2000	
Algeria	- - - - - -	- - - -	- - -	_			under	sulfur	2000 ppm	ppm	Total
Algeria	- - - - - -	- - - -	- - -	_		PAD District	4				
Algeria	- - - - -	- - - -	- - -	_							
Angola Ecuador Iran Iraq Kuwait Libya Nigeria Qatar Saudi Arabia United Arab Emirates	- - - - -	- - -	-	_	_	_	_	_		_	_
Iran	- - - -	_ _		-	-	-	-	-	-	-	_
Iraq Kuwait Libya Nigeria Qatar Saudi Arabia United Arab Emirates	- - - -	_	_	_	-	-	-	-	_	-	_
Kuwait	-		-	-	-	-	-	-	-	-	
Libya	-	_	_	_	_	_	_	_	-	_	_
QatarSaudi ArabiaUnited Arab Emirates		-	_	_	-	_	-	_	_	-	-
Saudi Arabia United Arab Emirates	-	-	_	_	-	-	-	-	_	-	_
United Arab Emirates	-	-	-	_	_	-	-	-	-	-	-
	_	_	_	_	_	_	_	_	_	_	
	-	-	-	-	-	-	-	-	-	-	_
New ORFO											
Non-OPEC	-	-	_	44 <b>44</b>	_	_	438 <b>438</b>	_	_	_	438 <b>438</b>
Other	_	_	_	0	_	_	<b>436</b>	_	_	_	436
Total	-	_	_	44	_	_	438	_	_	_	438
						PAD District	5				
							-				
OPEC	-	-	-	_	-	-	-	-	-	-	_
AlgeriaAngola	-	-	-	_	_	_	-	-	-	-	_
Ecuador	_	_	_	_	_	_	_	_	_	_	_
Iran	-	-	-	-	-	-	-	-	-	-	_
Iraq	-	-	-	_	_	_	-	-	_	-	_
Kuwait Libya	-	-	_	_	_	-	-	_	-	-	_
Nigeria	_	_	_	_	_	_	_	_	_	_	_
Qatar	-	-	-	_	-	_	-	-	_	-	_
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	
United Arab Emirates Venezuela	_	_	_	_	_	_	_	_	_	_	_
Non-OPEC	_	-	1,228	816	4,085	_	3,789	-	98	-	3,887
Argentina	-	-	_	-	-	-	-	-	-	-	
Aruba Australia	_	_	_	_	_	_	_	_	-	_	_
Brazil	-	-	1,228	_	-	-	-	-	_	-	_
Brunei	-	-	_	_	_	_		-	_	-	_
Canada	-	-	-	733	220	-	2,516 498	-	98	-	2,614 498
China Colombia	_	_	_	_	_	_	498	_	_	_	498
Finland	-	-	_	-	_	-	-	-	-	-	_
Germany	-	-	_	_	-	-	-	-	-	-	_
Indonesia Japan	-	-	_	_	_	_	- 299	_	_	-	299
Korea, South	_	_	_	54	_	-	476	_	-	-	476
Malaysia	-	-	-	-	-	-	-	-	-	-	_
Mexico	-	-	_	_	_	_	-	-	_	-	_
Netherlands Netherlands Antilles	_	-	-	-	_	_	-	-	_	-	_
Oman	_	_	_	_	_	_	_	_	_		_
Papua New Guinea	-	-	-	-	-	-	-	-	-	-	_
Peru	-	-	_	_	-	-	-	-	-	-	_
Singapore Sweden	-	-	_	_	_	_	_	_	_	-	_
Taiwan	-	-	-	-	_	-	-	-	-	-	_
United Kingdom	-	-	-	-	-	-	-	-	-	-	_
Virgin Islands III S	-	-	_	_	_	_	_	_	_	-	_
Virgin Islands, U.S Other	_	_	- 0	- 29	3,865	_	0	_	- 0	_	0
			_		0,000						
Total	-	-	1,228	816	4,085	-	3,789	-	98	-	3,887
Persian Gulf <sup>3</sup>											i

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) — Continued

							Residual	Fuel Oil	
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
					PAD District 4				
OPEC	_	_	_	106	_	_	_	_	
Algeria	-	-	_	-	-	-	-	-	
Angola	-	-	-	-	-	-	-	-	
Iran	_	_	_	_	_	_	_	_	
Iraq	_	_	_	98	_	_	_	_	
Kuwait	-	-	_	-	-	_	_	-	
Libya	-	-	-	-	-	-	_	-	
Nigeria Qatar	-		_			_	_	-	
Saudi Arabia	-	-	-	_	-	-	_	-	
United Arab Emirates	-	-	-	-	-	_	_	-	
Venezuela	-	_	-	_	-	-	-	-	
Non-OPEC	_	9	_	50	_	_	_	_	
Canada	_	9	-	-	-	_	-	_	
Other	_	0	-	50	-	_	-	-	
Total	_	9	_	156	_	_	_	_	
Total			_	130		_		_	
	<del>,</del>				PAD District 5				
OPEC	_	_	_	44	_	_	_	174	17
Algeria	_	_	_	-	_	_	_	-	
Angola	_	-	_	-	-	_	_	_	
Ecuador	-	-	-	-	-	-	_	174	17
IranIraq	_		_	-	_	_	_	_	
Kuwait	-	_	-	_	_	_	_	_	
Libya	-	-	-	-	-	-	_	-	-
Nigeria	-	_	-	-	_	-	-	-	
Qatar Saudi Arabia	_	_	_	43	_	_	_	_	
United Arab Emirates	_	-	_	-	-	_	_	_	
Venezuela	-	-	-	1	-	-	-	-	
Non-OPEC	55	20	_	29,039	45	_	1,157	11,567	12,72
Argentina	-	-	-	´ <b>-</b>	-	_	´ <b>-</b>	_	,
Aruba	-	-	-	_	-	-	_	-	
Australia Brazil	_		_	-	_	_	_	_	
Brunei	-	_	_	_	_	_	_	_	
Canada	-	20	-	9	-	-	667	977	1,64
China	-		_	3,628	_	-	_	-	
Colombia	_ _		_	_		_	_	_	
Germany	_	_	_	-	_	_	_	_	
Indonesia	-	-	_		-	_	_	-	
Japan Korea, South	- 55	_	-	4,875 20,495	- 45	-	-	_	
Malaysia	-		_	20,495	45	_		_	
Mexico	-		-	-		-	270	3,762	4,03
Netherlands	-	-	-	-	-	-	-	962	96
Netherlands Antilles Oman	-	_	_	_	_	-	-	-	
Papua New Guinea	_	_	_	_	_	_	_	_	
Peru	-	-	-	-	-	_	220	2,495	2,71
Singapore	_	_	_	_	_	_	_	947	94
Sweden Taiwan	_ _	_	_	_	_	_	_	_	-
United Kingdom	_		_			_	_	_	
Vietnam	-	-	-	-	-	-	-	-	
Virgin Islands, U.S	_	_	-	-	_	-	_	- 0.404	0.40
Other	0	0	-	32	0	-	0	2,424	2,42
Total	55	20	-	29,083	45	_	1,157	11,741	12,89
Persian Gulf <sup>3</sup>							-		
				43					

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2017 (Thousand Barrels) - Continued

		nemical stocks									Daily Average	
Country of Origin	Naphtha	Other Oils	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellan- eous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
						PAD D	istrict 4					
OPEC	-	_	_	-	_	_	_	106	106	_	0	0
Algeria	_	_	_	_	-	_	_	_	_	-	-	-
Angola	-	_	-	-	-	_	-	-	-	-	-	_
Iran	_	_	_	_	_	_	_	_	_	_	_	_
Iraq	_	_	-	_	_	_	_	98	98	_	o	C
Kuwait	-	-	-	-	-	-	_	-	-	-	-	-
Libya	_	_	-	_	_	_	_	_	_	-	-	-
Nigeria	_	_	_	_	_	_	_	_	-		-	-
Qatar Saudi Arabia	_	_	_	_	_	_	_	_	_	_	_	_
United Arab Emirates	-	_	-	_	-	_	_	_	_	-	-	-
Venezuela	_	_	_	_	_	-	_	_	-	-	-	-
New ODEC					44-			4.500	00.00-	075	4-	000
Non-OPEC	_	_	_	_	417 <b>417</b>	<del>-</del>	11 11	4,503 <b>4,453</b>	88,027 <b>87,977</b>	275 <b>275</b>	15 <b>15</b>	290 <b>289</b>
Other	_	_	_	_	0	_	0	<b>4,453</b>	50	0	0	203
							_			·		-
Total	-	_	-	-	417	-	11	4,609	88,133	275	15	290
						PAD D	istrict 5					
ODEC								0.010	220 411	COE	20	705
Algeria	_	_	_	_	_	_	_	<b>9,212</b> 6,071	<b>220,411</b> 6,071	695	30 20	<b>72</b> 5
Angola	_	_	_	_	_	_	_	0,071	8,774	29		29
Ecuador	_	_	-	_	-	_	_	174	58,176	191	1	191
Iran	_	_	_	_	_	_	_	_	_	-	-	-
Iraq	_	_	_	_	_	_	_	_	22,095	73	-	73
Kuwait Libya	_	_	_	_	_	_	_	685	20,464 4,855	67 14	2	67 16
Nigeria	-	_	_	_	_	_	_	-	2,137	7	_	7
Qatar	_	_	-	_	-	_	_	-	. –	-	-	-
Saudi Arabia	-	_	-	_	-	_	_	43	87,660	288	0	288
United Arab Emirates Venezuela	_	_	_	_ _	_ _	_ _	_	2,238	8,131 1	19 -	7 0	27 0
Non-OPEC	311	32	333	285	945	523	2	102,836	265,225	534	338	872
Argentina	-	_	_	_	-	-	_	-	-	-	-	-
Aruba	_	_	_	_	-	_	_	_	_	-	-	-
Australia	_	_	_	-	_	_	_	1 070	648	2	_	2
Brazil	_	_	_	_	_	_	_	1,279	18,650 245	57 1	4	61
Canada	_	_	1	285	664	57	2	22,970	91,207	224	76	300
China	-	_	245	_	_	_	_	4,371	4,371	-	14	14
Colombia	_	_	-	_	1	_	_	1,299	40,235	128	4	132
Finland	_	_	_	_	_	_	_	98 239	98 239		0	(
GermanyIndonesia	_	_	_	_	_	_	_	239	3,868	13	_	13
Japan	_	_	84	_	-	2	_	5,868	5,868	-	19	19
Korea, South	36	-	-	_	-	96	_	22,719	22,719	-	75	75
Malaysia	-	-	3	_	209	_	-	1,001	1,001	_	3	3
Mexico Netherlands	_	_	_	_	_	_	_	4,032 1,707	13,275 1,707	30	13	44
Netherlands Antilles	_	_	_	_	_	_	_	1,707	1,707		_	-
Oman	-	_	-	_	-	_	_	-	2,957	10	-	10
Papua New Guinea	-	-	-	_	-	_	-	-	_	-	-	-
Peru	-	-	-	-	_	_	-	4,324	4,959	2	14	16
Singapore	_	_	_	_	_	_	_	5,813 112	5,813 112	_	19	19 0
Sweden Taiwan	230	_	_	_	_	_	_	949	949	_	3	3
United Kingdom		-	-	_	-	-	-	1,250	1,250	-	4	4
Vietnam	-	-	-	-	-	-	-	-	453	1	-	1
Virgin Islands, U.S	_	-	_	_		-	_	-	-	-	-	-
Other	45	32	0	0	71	368	0	24,805	44,601	66	83	148
							1 -	440040	405.000	4 000		4 -0-
Total	311	32	333	285	945	523	2	112,048	485,636	1,229	369	1,597

<sup>- =</sup> No Data Reported.

<sup>The No Data Reported.

Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

Includes crude oil imported for storage in the Strategic Petroleum Reserve.

Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.</sup> 

Table 49. Exports of Crude Oil and Petroleum Products by PAD District, October 2017 (Thousand Barrels)

Commodity			PAD Districts			U.S.	Total
Commodity	1	2	3	4	5	Total	Daily Average
Crude Oil <sup>1</sup>	_	4,049	49,571	39	-	53,659	1,73
Hydrocarbon Gas Liquids	3,957	4,207	35,414	100	750	44,428	1,43
Natural Gas Liquids	3,957	4,207	35,414	100	750	44,428	1,43
Ethane	1,390	215	2,915	100	0	4,520	14
Propane	2,472	128	29,323	_	672	32,595	1,05
Normal Butane	15	249	3,152	8	75	3,498	11
Isobutane	3	1	13	_	-	16	
Natural Gasoline	78	3,615	11	92	2	3,798	12
Refinery Olefins	_	_	_	_	_	_	
Ethylene	_	-	_	_	_	_	
Propylene	_	_	_	_	_	_	
Butylene	_	-	_	_	_	_	
Isobutylene	-	-	-	-	-	-	
Other Liquids	186	2,104	11,245	0	257	13,791	44
Other Hydrocarbons	164	732	3,616	0	51	4,564	14
Hydrogen	-	-	_	_	-	-	
Oxygenates (excluding Fuel Ethanol)	1	1	2,111	0	2	2,115	6
Methyl Tertiary Butyl Ether (MTBE)	0	-	1,130	-	0	1,130	3
Other Oxygenates	1	1	981	0	2	985	3
Renewable Fuels (including Fuel Ethanol)	163	731	1,506	-	49	2,448	7
Fuel Ethanol	158	657	1,381	-	35	2,231	
Biomass-Based Diesel	5	73	125	-	14	217	
Other Renewable Diesel	-	-	-	-	-	-	
Other Renewable Fuels	-	-	-	-	-	_	
Other Hydrocarbons	-		-	_	-	-	
Unfinished Oils	16	1,190	5,521	0	140	6,867	22
Naphthas and Lighter	3	1,183	5,321	0	131	6,639	21
Kerosene and Light Gas Oils	13	/	200	0	9	228	
Heavy Gas Oils	-	-	-	-	-	-	
Residuum	6	181	2,107	0	66	2,361	7
Motor Gasoline Blend.Comp. (MGBC)	0	101	2,107	U	1	2,301	/
Conventional	5	181	2,102	0	65	2,353	7
Aviation Gasoline Blend. Comp.	5	-	2,102	-	-	2,353	,
Finished Datuslavin Dradvicta	2 660	2.105	02.262	27	10.004	110 100	2.55
Finished Petroleum Products Finished Motor Gasoline	<b>3,669</b>	<b>2,195</b> 140	<b>93,363</b> 21,181	37	<b>10,924</b> 1,285	<b>110,188</b> 22,707	<b>3,5</b> 5
Reformulated	100	140	21,101		1,200	22,707	73
Conventional	100	140	21,181	1	1,285	22,707	73
Finished Aviation Gasoline	100	140	21,101	1	1,205	22,707	70
Kerosene-Type Jet Fuel	6	40	4,362	_	463	4,872	15
Kerosene	2	203	3	_	2	209	10
Distillate Fuel Oil	1,362	367	40,228	_	3,497	45,453	1,46
15 ppm sulfur and under	1,190	0	35,848	_	1,833	38,871	1,25
Greater than 15 ppm to 500 ppm sulfur	171	48	2,304	_	227	2,750	1,20
Greater than 500 ppm sulfur	0	318	2,075	_	1,437	3,831	12
Residual Fuel Oil	543	368	9,165	18	826	10,921	35
Naphtha for Petro. Feed. Use	_	_	-	_	_	-	
Other Oils for Petro. Feed. Use	_	_	_	_	_	_	
Special Naphthas	-	-	-	-	-	-	
Lubricants	270	200	2,210	12	350	3,041	9
Waxes	73	41	19	-	5	139	
Petroleum Coke	1,232	636	15,808	_	4,473	22,149	71
Asphalt and Road Oil	68	198	381	6	23	677	2
Miscellaneous Products	13	2	7	0	0	22	
Total	7,812	12,554	189,593	176	11,931	222,067	7,16

Note: Totals may not equal sum of components due to independent rounding. Sources: U.S. Census Bureau and EIA estimates.

<sup>=</sup> No Data Reported.

1 On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Table 50. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January-October 2017 (Thousand Barrels)

0		F	AD Districts			U.S.	Total
Commodity	1	2	3	4	5	Total	Daily Average
Crude Oil <sup>1</sup>	4,004	57,873	247,806	797	4,533	315,011	1,03
Hydrocarbon Gas Liquids	36,887	65,035	298,964	2,528	12,781	416,195	1,36
Natural Gas Liquids	36,887	65,035	298,964	2,528	12,781	416,195	1,36
Ethane	11,447	17,022	22,732	2,520	12,761	51,202	1,30
Propane	15,293	2,295	245,048	-	9,300	271,097	89
Normal Butane	1,531	3,323	30,493	204	3,415	38,838	12
Isobutane	8	3,323	1,294	204	3,415	1,301	12
	-	40 411	,	2,324	•		
Natural Gasoline	8,612	42,411	304	2,324	106	53,757	17
Refinery Olefins	-	-	_	-	-	_	
Ethylene	-	-	_	-	-	-	
Propylene	-	-	-	-	-	-	
Butylene	-	-	-	-	-	-	
Isobutylene	-	-	-	-	-	-	
Other Liquids	12,217	18,982	108,015	98	5,602	144,914	47
Hydrogen/Oxygenates/Renewables/	, i	<i>,</i>	·		·	,	
Other Hydrocarbons	847	7,333	38,585	23	1,896	48,685	16
Hydrogen	_	_	_	_	_	_	
Oxygenates (excluding Fuel Ethanol)	12	6	20,451	0	18	20,487	6
Methyl Tertiary Butyl Ether (MTBE)	1	0	11,227	_	0	11,228	3
Other Oxygenates	11	6	9,223	0	18	9,259	3
Renewable Fuels (including Fuel Ethanol)	835	7,327	18,134	23	1,878	28,198	9
Fuel Ethanol	757	6,149	17,477	0	1,670	26,053	8
Biomass-Based Diesel							
	78	1,178	657	23	208	2,144	
Other Renewable Diesel	-	-	-	-	-	-	
Other Renewable Fuels	-	-	-	-	-	-	
Other Hydrocarbons							_ :
Unfinished Oils	10,954	10,890	51,494	74	1,375	74,786	24
Naphthas and Lighter	10,460	10,827	45,352	73	1,323	68,035	22
Kerosene and Light Gas Oils	494	62	6,142	1	52	6,751	2
Heavy Gas Oils	-	-	-	-	-	-	
Residuum	_	-	-	-	-	-	
Motor Gasoline Blend.Comp. (MGBC)	416	759	17,936	1	2,332	21,442	7
Reformulated	5	0	67	-	8	80	
Conventional	411	758	17,869	1	2,323	21,362	7
Aviation Gasoline Blend. Comp	-	-	, -	-	_	, -	
Finished Petroleum Products	53,241	14,775	828,407	378	101,390	998,191	3,28
Finished Motor Gasoline	2,946	1,620	187,225	8	14,801	206,600	68
Reformulated	2,540	1,020	107,220	_	14,001	200,000	00
Conventional	2,946	1,620	187,225	8	14,801	206,600	68
Finished Aviation Gasoline	2,540	1,020	107,220	_	14,001	200,000	00
Kerosene-Type Jet Fuel	1,150	1,894	44,818	_	8,988	56,849	18
Kerosene	644	218	607	_	31	1,500	10
		-		_			
Distillate Fuel Oil	24,286	2,474	361,902	-	29,182	417,844	1,37
15 ppm sulfur and under	21,012	11	314,778	-	17,919	353,720	1,16
Greater than 15 ppm to 500 ppm sulfur	3,170	1,077	28,761	-	2,259	35,267	11
Greater than 500 ppm sulfur	103	1,387	18,364	_	9,004	28,858	9
Residual Fuel Oil	13,779	2,816	70,006	190	5,744	92,536	30
Naphtha for Petro. Feed. Use	-	-	-	-	-	_	
Other Oils for Petro. Feed. Use	-	-	_	-	_	-	
Special Naphthas	-	-	-	-	-	-	
Lubricants	2,064	1,867	27,668	115	2,783	34,496	11
Waxes	691	261	230	1	60	1,244	
Petroleum Coke	6,784	2,341	132,860	1	39,504	181,490	59
Asphalt and Road Oil	780	1,277	2,871	62	296	5,286	1
Miscellaneous Products	117	7	218	0	3	345	
Fotal	106,348	156,664	1,483,191	3,801	124,305	1,874,311	6,16

Note: Totals may not equal sum of components due to independent rounding. Sources: U.S. Census Bureau and EIA estimates.

<sup>=</sup> No Data Reported.

1 On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	ine Blending C	omponents
Destination	Crude Oil <sup>1</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
Argontina		0		1		675	675			
Argentina	_	1,450	_	0	_	1	1	1	_	
Bahamas	1,440	23	_	_	_	73	73		_	
Bahrain		-	_	_	_	-	-	_	-	
Belgium	_	-	_	303	_	0	0	_	-	
Belize	-	-	_	-	_	156	156	-	-	
Brazil	1,340	2,020	_	42	_	1,998	1,998	_	-	
Canada	8,648	4,502	_	1,196	-	216	216	-	246	24
Cayman Islands	-	5	_	-	-	24	24	-	-	
Chile	_	261	_	189	_	474	474	_	-	
China	13,876	7,522	_	777	-	405	405	-	-	
Colombia	499	0	_	677	_	923	923	-	-	
Costa Rica	-	0	-	6	-	640	640	-	0	
Denmark	-	-	_	_	-	-	_	-	0	
Dominican Republic	_	822	_	31	_	466	466	_	50	5
Ecuador	-	699	-	9	_	646	646	_	-	
Egypt	_	0	-	-	_	_		-	-	
El Salvador	-	206	-	0	-	298	298	-	-	
Finland	-	-	-	0	-	_	-	-	-	
France	3,726	252	-	19	_	_	-	-	-	
Germany	-	0	-	5	-	_	-	-	-	•
Ghana	-	-	-	-	-	_	-	-	-	
Gibraltar	-	-	-	_	-	_	-	-	-	
Greece	-	- 410	_	_ 0	-	- 1 115	- 1 115	-	-	
Guatemala	_	419	_	3	-	1,115	1,115	-	-	
Honduras	1 000	472 0	_	0	_	372	372	_	_	
Hong Kong	1,989	-	_	16	_	_	_	0	_	
IndiaIndonesia	826	1,648 1,396	_	-	_	_	_	U	_	
Ireland	_	1,390	_	_	_	_	_	_	_	
Israel	_	1	_	15	_	_	_	_	_	
Italy	2,580		_	673	_	_	_	_	_	
Jamaica	2,560	66	_	-	_	2	2		_	
Japan	1,000	8,456	_	3	_	0	0	1	_	
Korea, South	1,499	1,954	_	95	_	151	151	-	_	
Lebanon	1,100	- 1,001	_	_	_	0	0	_	_	
Mexico	_	4,840	_	436	_	12,552	12,552	6	1,942	1,94
Montenegro	_	- 1,010	_	-	_	- 12,002	- 12,002	_	1,012	1,01
Morocco	_	9	_	4	_	_	_	_	_	
Mozambique	-	-	_	_	_	_	-	-	-	
Netherlands	5,621	1,143	_	1,158	_	285	285	_	_	
Netherlands Antilles	´ -	´ _	_	· –	-	-	_	-	-	
New Zealand	-	0	_	0	-	1	1	0	-	1
Nicaragua	-	-	-	-	-	104	104	-	0	-
Nigeria	-	-	-	0	-	329	329	-	-	
Norway	676	867	-	_	_	_	_	-	-	
Pakistan	_	-	_	_	_	_	_	_	_	
Panama	_	84	_	-	_	303	303	-	-	
Peru	-	0	-	225	-	185	185	-	-	
Philippines	_	-	_	-	_	_	_	-	-	
Portugal	-	418	-	-	-	-	_	-	-	
Puerto Rico	_	21	_	0	_	81	81	0	1	
Romania	-	-	-	-	-	-	-	-	-	
Saudi Arabia	-	-	-	7	-	-	_	-	-	
Serbia	-	-	-	_	-	_	-	-	-	
Singapore	-	2,221	-	20	-	-	-	-	-	
South Africa			-	-	-	_	_	-	-	
Spain	1,232	156	_	-	-	-	-	-	-	
Switzerland	-	-	-	-	-	_	-	-	-	
Taiwan	1,048	0	-	1	-	_	_	-	-	
Thailand	351	-	-	1	_	_	_	-	-	
Trinidad and Tobago	568	0	_	4	_	0	0	_	-	
Turkey	508	0	-	_ 0	_	_ 1	_	-	- 0	
United Arab Emirates	4 501	-	_	0	_	1	1	_	U	
United Kingdom Venezuela	4,591	1,176	_	949	_			_	_	
	1,641	1,319	_	949	_	230	230	_	114	11:
Other	1,041	1,319	_	2	_	230	230	_	114	113

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2017 (Thousand Barrels) — Continued

	Oxyge	enates		Renewal	ole Fuels			Di	istillate Fuel (	Dil	
Destination	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
Argentina	_	0	_	_	_	_	757	_	_	_	757
Australia	_	0	0	_	_	_	757	_	_	_	757
Bahamas	-	_	-	-	_	_	83	_	337	_	421
Bahrain	-	-	_	-	-	-	0	-	_	-	0
Belgium	-	0	0	_	_	_	476	- 35	93	_	569 35
Brazil	0	0	308	_	_	_	9,014	-	302	_	9,316
Canada	-	1	807	188	_	-	0,011	449	393	-	843
Cayman Islands	-	_	_	_	-	_	67	-	-	-	67
Chile	274	_	0	_	_	_	2,901	_	_	_	2,901
China Colombia	0	0	0 59	_	_	_	2 461	_	_	_	2 461
Costa Rica	_	0	0	_	_	_	1,348	_	_	_	1,348
Denmark	_	_	_	_	_	_	_	_	_	_	-
Dominican Republic	-	-	2	-	-	-	301	233	219	-	752
Ecuador	-	_	-	-	-	_	1,581	-	-	_	1,581
Egypt	-	-	_	_	_	-	220	- 110	_	-	33
Finland	_	_	_	_	_	_	-	-	_	_	-
France	-	0	-	-	-	-	1,522	-	-	-	1,522
Germany	0	0	_	2	_	-	639	_	-	-	639
Ghana	-	-	-	-	-	-	_	_	-	-	-
Gibraltar	-	_	_	_	_	_	385	77	_	_	462
Guatemala	_	0	_	_	_	_	944	717	_	_	1,661
Honduras	_	_	_	_	_	_	74	338	_	_	412
Hong Kong	_	-	0	-	_	_	_	_	-	_	-
India	0	0	315	-	-	_	0	-	-	_	(
Indonesia	-	0	0	_	_	_	_	_	_	_	-
Ireland	_	0	0	_	_	_	_	_	_	_	_
Italy	_	_	_	_	_	_	_	_	_	_	_
Jamaica	-	_	17	_	_	_	418	_	_	-	418
Japan	-	981	2	-	-	_	0	-	_	_	C
Korea, South	-	0	3	_	-	-	1	_	101	-	102
Lebanon	- 856	- 1	82	3	_	_	7,893	347	38	_	8,278
Montenegro	-		- 02	_	_	_	7,035	-	-	_	0,270
Morocco	_	_	_	_	_	_	594	_	_	-	594
Mozambique	-	-	_	_	_	_	-	_	_	-	-
Netherlands	-	_	50	_	-	-	1,236	54	-	-	1,290
Netherlands Antilles New Zealand	-	_	0	_	_	_	_	_	_	-	-
Nicaragua	_	_	_	_	_	_	0	_	331	_	33
Nigeria	_	_	10	_	_	_	_	_	_	-	-
Norway	-	-	_	-	_	-	-	_	-	-	-
Pakistan	_	0	_	_	-	_	- 4 004	-	_	_	1 101
Panama	-	0	73	21	_	_	1,094 2,366	309	_	_	1,400 2,366
Philippines	_	_	110	_	_	_	2,300	_	_	_	2,300
Portugal	_	_	-	_	-	_	-	-	_	_	-
Puerto Rico	-	0	0	0	-	_	686	1	_	_	687
Romania	_	-	_	-	-	_	-	-	-	_	-
Saudi Arabia Serbia	0	_	40	_	_	_	_	_	_	_	-
Singapore	_	1	32	0	_	_	_	_	1,055	_	1,055
South Africa	_	0	-	_	-	_	-	-		_	- 1,550
Spain	_	_	320	_	-	_	605	-	_	_	605
Switzerland	-	-	-	3	-	-	-	_	-	-	-
Taiwan	-	0	0	_	_	_	_	_	_	_	-
ThailandTrinidad and Tobago		0	_	_	_	_	0	_	0	_	-
Turkey	_	0	_	_	_	_	0	_	_	_	(
United Arab Emirates	-	_	_	_	-	_	0	-	_	_	(
United Kingdom	_	0	0	_	-	_	989	-	_	_	989
Venezuela	_	_	0	_	_	_	0	-	- 000	_	2.051
Other	_	1	1	_	-	_	2,214	80	962	_	3,255
	I	985	2,231	217		1	38,871	2,750	3,831	ı	i e

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2017 (Thousand Barrels) — Continued

							Petroch Feeds	
Destination	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Naphtha	Other Oils
Argentina	-	-	-	-	-	-	-	
Australia	_	_	_	_	-	-	_	
Bahamas	-	-	-	60	-	19	-	
BahrainBelgium	-	-	-	-	_	_ 0	-	
elize	_	_	_	10	_	0	_	
razil	_	_	_	-	_	_	_	
anada	204	-	-	664	-	988	-	
ayman Islands	-	-	-	7	-	_	-	
hile	1	-	-	-	-	-	-	
hina	1	-	-	0	-	1	-	
olombia	_	-	_	- 90	_	0	_	
osta Rica	0	-	-	143	_	199	_	
ominican Republic	_	_	_	140		_	_	
cuador	_	-	-	9	_	528	_	
gypt	_	_	_	-	_	-	_	
Salvador	0	-	_	20		_	-	
inland	_	_	-	_	-	_	_	
rance	-	-	-	-	-	-	-	
ermany	-	-	-	-	-	-	-	
ihanaibraltar	-	-	-	-	_	- 245	-	
reece	_	_	_	-	_	245	_	
uatemala	0	_	_	54		14	_	
onduras	-	_	_	62	_	210	_	
ong Kong	_	-	_	-	-	0	_	
idia	-	-	-	-	-	-	-	
ndonesia	-	-	_	-	-	-	-	
eland	-	-	-	-	-	-	-	
rael	-	-	-	333	-	-	-	
alyalyaly	_ 0	-	-	- 50	_	- 482	-	
apan	-	_	_	50	_	462	_	
orea, South	_	_	_	_	_	_	_	
ebanon	_	-	-	-	-	398	-	
lexico	1	-	-	1,054	-	757	-	
lontenegro	-	-	_	-	-	_	-	
lorocco	-	-	-	-	-	-	-	
lozambique	-	-	-	-	_	-	-	
etherlandsetherlands Antilles	-	-	-	260	-	425	-	
ew Zealand	_	_	_	_		_	_	
icaragua	_	_	_	_		0	_	
ligeria	_	_	_	_	-	_	_	
orway	-	-	-	-	_	-	-	
akistan	-	_	-	_	-	_	-	
anama	0	_	_	636	-	592	-	
eru	0	-	_	_	-	0	-	
hilippines	-	-	_	-		_	-	
ortugal	_ 0	-	_	_ 0	_	_	-	
uerto Ricoomania	0	-	_	0	_	_	_	
audi Arabia	_	_	_	_	_	_	_	
erbia	_	-	_	_	_	_	_	
ngapore	0	-	_	-	-	4,757	-	
outh Africa	-	-	-	-	-	-	-	
oain	-	-	_	-	_	_	-	
witzerland	_	-	_	_	_	_	_	
aiwan	-	-	_	-	_	0 404	-	
hailand rinidad and Tobago	- 0	-	_	0	_	404	_	
urkey	0	_	_	0		_	_	
nited Arab Emirates	0	_	-	_	_	_	_	
nited Kingdom	_	_	_	420	_	_	_	
enezuela	-	-	-	-		-	-	
ther	2	_	_	860	-	902	_	
al	209	-1	_	4,872	_	10,921	_	

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2017 (Thousand Barrels) - Continued

									Daily Average	
Destination	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellanous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Argentina	0	0	64	15	_	1,512	1,512	_	49	4:
Australia	1	217	0	35	_	1,704	1,704	_	55	5
Bahamas	_	-	1	4	_	600	2,040	46	19	6
Bahrain	-	-	-	1	-	1	1	-	0	(
Belgium	-	107	0	310	0	1,289	1,289	_	42	4:
Belize	-	_	-	1	-	202	202	-	7	
Brazil	101	843	0	305 297	1 7	14,834	16,174	43 279	479 367	52: 64:
Canada Cayman Islands	101	839	266	297	/	11,365 104	20,014	219	367	041
Chile	0	0	0	58	0	4,159	4,159	_	134	13
China	3	2,615	3	26	0	11,354	25,230	448	366	814
Colombia	0	0	0	99	_	2,219	2,718	16	72	8
Costa Rica	0	-	5	20	0	2,309	2,309	-	74	7-
Denmark	-	83	0	1	-	227	227	-	7	
Dominican Republic	0	195	33	14	0	2,506	2,506	-	81	8
Ecuador	0	186	0	44	-	3,702	3,702	-	119	119
Egypt	_	364	_	10	-	374	374	-	12	1:
El Salvador		275	_	5 0	_	1,134	1,134	_	37 0	3
France	0	244	_	90	0	2,128	5,854	120	69	189
Germany	2	0	1	59	0	708	708	-	23	2:
Ghana	_	_	_	0	_	0	0	_	0	
Gibraltar	-	-	-	-	_	707	707	-	23	2:
Greece	-	305	_	0	_	305	305	_	10	10
Guatemala	0	168	-	27	-	3,457	3,457	-	112	112
Honduras	0	-	34	13	-	1,578	1,578	-	51	5
Hong Kong	0	4 754	-	2	0	3	1,992	64	0	64
IndiaIndonesia	2	4,754	1 2	29 1	0	6,767 1,400	7,593 1,400	27	218 45	245 45
Ireland	- -	44	_	0	0	1,400	1,400	_	45	46
Israel	0	303	_	3	0	655	655	_	21	2
Italy	0	628	0	0	0	1,303	3,883	83	42	125
Jamaica	_	-	1	9	0	1,045	1,045	-	34	34
Japan	1	1,633	0	19	3	11,099	12,099	32	358	390
Korea, South	0	266	2	19	0	2,591	4,090	48	84	13:
Lebanon	_	188	_	1	_	588	588	-	19	19
Mexico	18	3,127	144	710	/	34,811	34,811	-	1,123	1,123
Montenegro	_	303	_	0	_	909	909	_	29	29
Morocco Mozambique	_	52	_	- -	_	52	52	_	29	23
Netherlands	6	156	0	2	_	4,776	10,396	181	154	335
Netherlands Antilles	_	-	_	_	_			-	-	-
New Zealand	0	50	32	2	_	85	85	_	3	(
Nicaragua	-	-	-	4	_	440	440	-	14	14
Nigeria	-	_	-	140	-	479	479	-	15	15
Norway	_	126	-	0	-	993	1,669	22	32	5-
Pakistan	0	_	-	0	0	1	1	-	0	10
Panama	0	_ 0	30	184	_ 0	3,231	3,231	-	104	104
Peru	0	553	_	68 1	U	2,939 664	2,939 664	_	95 21	9: 2:
Philippines	-	555	_	0	_	419	419	_	14	1
Puerto Rico	_	_	_	27	0	819	819	_	26	2
Romania	_	_	_	0	_	0	0	_	0	
Saudi Arabia	0	6	0	6	0	59	59	-	2	:
Serbia	-	-	-	-	-	-	-	-	-	-
Singapore	0	397	0	3	0	8,485	8,485	_	274	27
South Africa	0	56	0	59	_	115	115	_	4	
Spain	0	235	_	0	_	1,316	2,548	40	42	82
Switzerland	0	_	_ 0	0 5	_ 0	3	1 055	34	0	34
TaiwanThailand	0	0	0	3	0	8 408	1,055 759	34 11	13	24
Trinidad and Tobago		0	0	2	0	7	575	18	0	19
Turkey	0	1,737	_	23	0	1,760	2,268	16	57	7:
United Arab Emirates	0	0	-	6	_	8	8	-	0	
United Kingdom	0	_	0	31	0	2,617	7,208	148	84	233
Venezuela	_	66	_	129		1,145	1,145	_	37	37
Other	4	1,028	57	118	4	7,885	9,528	55	254	300
otal	139	22,149	677	3,041	22	168,407	222,067	1,731	5,432	7,163

Note: Totals may not equal sum of components due to independent rounding. Sources: U.S. Census Bureau and EIA estimates.

<sup>=</sup> No Data Reported.

1 On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2017 (Thousand Barrels)

					Finis	hed Motor Gas	oline	Motor Gasol	line Blending Co	omponents
Destination	Crude Oil <sup>1</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
Argentina	1,376	1	_	630	_	2,123	2,123	_	0	(
Australia	223	5,866	_	3	_	2,123	2,123	1	1	
Bahamas	6,271	221	_	314	_	1,413	1,413	0	2	
Bahrain	· –	-	-	-	-	5	5	1	-	
Belgium	-	544	-	718	-	422	422	-	1	
Belize	_	0	-	0	-	670	670	-	0	
Brazil	3,407	16,361	-	4,114	-	9,387	9,387	-	163	16
Canada	93,512	76,660 17	_	20,278	_	4,059 182	4,059 182	- 0	3,631	3,63
Cayman Islands Chile	_	7,603	_	1,236	_	2,500	2,500	-	1	
China	63,442	44,413	_	3,090	_	496	496	0	5	
Colombia	7,435	188	-	12,375	-	8,286	8,286	-	248	248
Costa Rica	_	1,023	-	38	-	5,842	5,842	-	704	704
Denmark	683	_	_	0	-	193	193	-	0	
Dominican Republic	1,285	9,813	-	51	-	3,550	3,550	0	331	333
Ecuador	-	4,567	_	314	-	6,857	6,857	0	507	50
Egypt	_	2,182	-	2	-	-		-	-	-
El Salvador	-	2,006	-	4 0	-	3,367 0	3,367 0	_ 0	1	
Finland	8,581	3,367	_	824	_	1	1	9	0	10
Germany	545	3,307	_	42	_	3	3	9	1	-
Ghana	-	1,480	_	-	_	966	966	_	0	(
Gibraltar	295	-,	_	_	_	-	-	_	_	-
Greece	-	0	-	-	-	1	1	-	-	-
Guatemala	-	3,553	-	56	-	11,504	11,504	-	201	20
Honduras	-	3,456	-	10	-	3,284	3,284	-	569	569
Hong Kong	2,721	1,151	-	2	-	1	1	_	0	(
India	7,040	16,421	-	24	-	1	1	0	0	
Indonesia	_	4,853	-	18 0	-	_ 1	_ 1	0	-	(
IrelandIsrael	_	4	_	19	_	8	8	_	0	-
Italy	11,634	235	_	700	_	_	-	_	_	
Jamaica	- 11,001	446	_	0	_	717	717	-	0	
Japan	8,621	63,539	-	2,327	-	154	154	5	4	;
Korea, South	14,284	28,330	-	1,163	-	461	461	0	1	
Lebanon	-	-	-	0	-	0	0	-	-	-
Mexico	-	38,813	-	4,581	-	114,556	114,556	59	13,148	13,207
Montenegro	-	- 1 040	_	-	-	-	-	-	-	-
Morocco	_	1,949 551	-	54	-	_	_	-	-	-
Mozambique Netherlands	23,504	11,715	_	8,505	_	1,357	1,357		34	34
Netherlands Antilles	20,504	- 11,710	_	- 0,505	_	1,007	1,007	_	-	-
New Zealand	_	5	_	0	_	1	1	0	0	(
Nicaragua	801	0	-	0	-	1,140	1,140	-	0	(
Nigeria	-	_	-	1	-	959	959	-	-	-
Norway	1,350	8,527	-	-	-	1	1	0	_	(
Pakistan	-	-	-	-	-	-	-	-	-	-
Panama	1,125	3,083	-	50	-	7,023	7,023	-	198	198
Peru	1,719	513	-	242 1	-	5,015	5,015	-	246	24
PhilippinesPortugal	_	1,406	_	-	_	1	1	_	-	
Puerto Rico	_	50	_	3	_	319	319	0	11	11
Romania	_	-	_	-	_	0	0	-	-	
Saudi Arabia	_	0	-	30	-	3	3	1	-	
Serbia	-	_	-	-	-	-	-	-	-	-
Singapore	9,318	17,616	-	745	-	139	139	-	0	(
South Africa	500	179	-	1	-	299	299	-	0	(
Spain	5,152	3,394	-	0	_	0	0	-	238	238
Switzerland Taiwan	620 1,048	275	-	0 1,432	-	458 3	458 3	_	234	234
Thailand	2,550	2/5	_	1,432	_	3	3	_	0	234
Trinidad and Tobago	568	4	_	43	_	1	1	1	0	
Turkey	508	3,718	_	0	_	_	_	1	0	
United Arab Emirates	-	255	-	42	-	2	2	0	0	(
United Kingdom	24,427	11,704	_	157	-	7	7	0	1	
Venezuela	_	253	-	9,221	-	4,370	4,370	-	577	57
Other	10,466	13,884	_	1,310	-	4,489	4,489	2	304	304
1.1										
otal	315,011	416,195	_	74,786	_	206,600	206,600	80	21,362	21,44

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2017 (Thousand Barrels) — Continued

	Oxyge	nates		Renewal	ole Fuels			Di	stillate Fuel C	Dil	
Destination	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
Argentina	_	0	2	_	_	_	10,288	740	1,301	_	12,33
Australia	0	0	1	_	_	_	319	-	1,001	_	31
Bahamas	-	2	2	_	_	_	1,300	75	3,197	_	4,57
Bahrain	-	_	0	_	_	_	0	_	_	-	
Belgium	67	0	47	0	_	_	2,020	278	1,046	_	3,34
Belize	- 0	_	0 707	_	_	-	0 50.700	148	562	-	62.00
Brazil	0	0 5	8,787 6,688	2 1,881	_	_	58,709 9	3,815 3,926	2,353	_	63,08 6,28
Cayman Islands	_	-	0,000	1,001	_	_	1,334	0,920	2,555	_	1,33
Chile	2,183	0	2	-	-	-	28,523	_	260	_	28,78
China	0	1	2	0	-	-	281	_	0	_	28
Colombia	-	0	335	_	_	_	6,010	-	_	-	6,0°
Costa Rica	-	0	2	_	_	_	7,720	_	0	_	7,72
Denmark	-	_	-	_	_	_	48	125	- 507	-	17
Dominican Republic Ecuador	-	- 0	0	_	_	_	2,393 8,062	709 2,386	527 264	-	3,62 10,7
Egypt	-	0	1	_	_	_	8,062	2,300	204	_	10,7
El Salvador	_		_	_	_	_	684	2,630	0	_	3,3
Finland	-	_	_	_	_	_	300	_,	_	_	3(
France	-	1	4	-	-	_	18,029	329	363	-	18,7
Germany	0	0	1	9	-	-	1,238	-	-	-	1,23
Ghana	-	-	0	-	-	-	_	-	_	-	
Gibraltar	-	-	_	_	_	_	5,614	1,826	807	_	8,24
GreeceGuatemala	-	0	1	_	_	_	12,229	4,037	694	-	16,95
Honduras	_	0	0	_	_	_	2,536	1,548	113	_	4,1
Hong Kong	_	0	1	_	_	_	2,330	1,540	-	_	7,1,
India	0	0	3,266	-	-	-	3	-	_	_	
Indonesia	_	0	0	_	_	_	_	_	-	_	
Ireland	0	0	1	_	_	_	_	_	_	_	
Israel	-	0	1	0	_	_	1	_	-	_	
Italy	-	0	0	4	_	-	1,013	20	710	-	1,03
Jamaica Japan	_	9,221	413 9	_	_	_	2,168 1	75 	712	_	2,95
Korea, South	0	1	727	2	_	_	7	_	816	_	82
Lebanon	-	0	-	_	-	-	0	409	281	_	69
Mexico	7,553	10	568	85	-	-	70,373	1,170	324	-	71,80
Montenegro	-	_	_	_	_	_	_	-	_	-	
Morocco	-	_	_	_	_	_	5,652	_	_	-	5,6
Mozambique Netherlands	-	3	436	10	_	-	24,188	2,030	797	-	27,0°
Netherlands Antilles	_	- -	430	10	_	_	24,100	2,030	797	_	21,0
New Zealand	_	0	1	_	_	_	_	_	_	_	
Nicaragua	-	_	0	4	-	-	268	1,153	431	_	1,8
Nigeria	-	-	394	-	-	-	-	_	-	-	
Norway	-	0	0	4	_	_	10	_	_	-	
Pakistan	-	0	0	_	_	_				_	
Panama		0	0 740	0	_	_	11,138	1,951	645	-	13,7
Peru	-	0	749 1,328	124	_	-	21,424 0	358 0	404	_	22,1
Philippines	-	0	1,328	_	_	_	0	-	_	_	
Puerto Rico	_	2	173	0	_	_	1,567	294	1	_	1,8
Romania	_	_	-	_	_	_	311			_	3
Saudi Arabia	1	0	41	_	_	_	1	_	_	_	
Serbia	-	_	_	-	-	-	-	-	-	-	
Singapore	0	7	358	3	_	_	6,051	_	4,744	_	10,7
South Africa	-	0	-	0	_	_	1,013	-		_	1,0
Spain	-	_	320 98	16	_	_	3,725	260 149	555	-	4,5
Switzerland	0	0	98	16	_	_	60	149	0	_	2
Thailand	_	0	0	_	_	_	2	_	0	_	
Trinidad and Tobago	_	0	0	0	_	_	1	_	0	_	
Turkey	_	0	-	_	_	_	376	_	_	_	3
United Arab Emirates	-	0	865	_	_	_	3	_	_	-	
United Kingdom		1	102	_	_	_	10,814	0	423	_	11,2
Venezuela	1,424	0	0	_	_	_	3,103	285	1,064	-	4,4
Other	-	5	318	0	_	_	22,799	4,541	6,173	_	33,5
į.											

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2017 (Thousand Barrels) — Continued

							Petroche Feedst	
Destination	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Naphtha	Other Oils
Argentina	0	_	_	475	_	37		
Australia	-	_	_	-10	_	-	_	
Bahamas	_	_	_	404	-	4,102	_	
Bahrain	-	-	-	-	-	,   –	-	
Belgium	-	-	_	-	-	84	-	
Belize	0	-	_	10	-	-	-	
Brazil	0	-	-	1,702	-	445	-	
Canada	804	-	-	11,248	_	11,080	-	
Cayman Islands	57	-	-	1,526	-	1	-	
Chile	7	-	_	1,825 4	_	1,689	-	
China Colombia	4	_	_	847	_	301	_	
Costa Rica	0	_	_	1,202	_	401	_	
Denmark	-	_	_	662	_	-	_	
Dominican Republic	0	_	_	1,686	_	271	_	
cuador	-	_	_	98	_	3,726	-	
gypt	_	_	_	_	_	887	_	
Salvador	0	-	_	280	_	-	-	
inland	142	_	_	307	_	_	-	
rance	48	-	-	942	_	-	-	
Germany	0	-	-	- 1	_	2	-	
Ghana Gibraltar	_	_	_	1		1,118	_	
Greece	_	_	_	_	_	1,110		
Suatemala	97	_	_	986	_	1,119	_	
londuras	50	-	_	603	_	2,623	-	
ong Kong	1	-	-	-	-	0	-	
ndia	0	-	_	1	-	0	-	
ndonesia	-	-	-	0	-	-	-	
eland	-	-	-	-	_	-	-	
srael	1	-	-	1,325	-	-	-	
alyanaica	- 0	-	_	0 971	_	3,252	-	
apan	1	_	_	1	_	3,232	_	
orea, South	0	_	_	0	-	0	_	
ebanon	-	-	-	-	-	5,252	-	
lexico	30	-	-	11,869	-	12,113	-	
Iontenegro	-	-	_	-	-	-	-	
lorocco	-	-	-	1,165	-	578	-	
ozambique	-	-	-	-	_	-	-	
etherlands	3	-	-	2,569	-	3,511	-	
etherlands Antillesew Zealand	_	-	_	-	_	-	_	
icaragua	0	_	_	_	_	0	_	
igeria	-	_	_	0	_	-	_	
orway	-	_	-	_	-	-	_	
akistan	_	_	_	_	_	0	_	
anama	0	-	_	5,526		4,776	-	
eru	0	_	-	2,219	-	192	-	
hilippines	-	-	_	0	_	0	-	
ortugal	_	-	-	-	_	-	-	
uerto Rico	1	-	_	1		4	-	
omaniaaudi Arabia	1	-	-	-	_	- 0	-	
erbia	-	_	_	_	_	-	_	
ngapore	1	_	_	1	_	26,736	_	
outh Africa	-	_	_	304	_	380	_	
pain	-	-	_	0	_	0	-	
witzerland	-	_	_	_	-	_	-	
aiwan	0	-	_	1	_	5	-	
hailand	0	-	-	-	_	405	-	
rinidad and Tobago	0	-	_	3	_	0	-	
urkey nited Arab Emirates	0	_	_	- 1	_	301	-	
Inited Kingdom	-	_	_	1,050		554	_	
enezuela	_	_	-	-1,000	_	648	_	
Other	243	_	_	5,034	_	5,942	_	
				·		,		
	1,500			56,849		92,536		

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2017 (Thousand Barrels) - Continued

									Daily Average	
Destination	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellanous Products	Total Products	Total Crude Oil and Products	Crude Oil	Products	Total
Argontino	4	533	259	2,682	0	19,076	20,452	5	63	6
Argentina	6	1,961	259	2,002	1	8,306	8,529	1	27	6
Bahamas	0	1,901	30	413		11,477	17,748	21	38	5
Bahrain	0	_	30	5	0	11,477	17,740		0	3
Belgium	4	1,757	2	3,279	2	10,272	10,272	_	34	3
Belize	-	1,757	0	12	_	841	841	_	3	
Brazil	5	10,988	1	2,518	5	117,567	120,974	11	387	39
Canada	807	5,838	2,003	2,766		154,074	247,586	308	507	81
Cayman Islands	_	_	9	15	-	3,140	3,140	-	10	1
Chile	4	0	405	835	1	45,387	45,387	-	149	14
China	91	17,363	34	731	7	68,213	131,656	209	224	43
Colombia	3	1	114	911	2	29,626	37,061	24	97	12
Costa Rica	1	659	173	176	0	17,943	17,943	_	59	5
Denmark	0	688	2	204	-	1,921	2,605	2	6	
Dominican Republic	2	850	341	226		20,758	22,043	4	68	7.
Ecuador	1	1,332	1	454	0	28,568	28,568	-	94	9
Egypt	0	3,972	0	28	-	7,072	7,072	_	23	2
El Salvador	1	427	0	221	_	9,621	9,621	-	32	3
Finland	0	275	0	6		1,032	1,032	-	3	
France	3	1,743	0	746		26,409	34,990	28	87	11
Germany	17	311	8	975	1	2,607	3,152	2	9	1
Ghana	0	1	- 36	1 604	-	2,450	2,450	-	8	2
Gibraltar	_	4 170		1,624	_	11,026	11,321	1	36	3
Greece	0	4,178	1 0	3 197	_	4,184	4,184	-	14 120	1 12
Guatemala	0	1,776 1,609	136	118		36,449	36,449	_	55	5
Honduras	5	1,009	0	25		16,656 1,188	16,656 3,910	9	4	1
Hong Kong	19	31,220	10	732	1	51,700	58,739	23	170	19
ndiandonesia	19	31,220	15	31	1	4,920	4,920	23	16	1
reland	0	549	13	1	0	552	552	_	2	
srael	0	1,737	_	721	0	3,817	3,817		13	1
taly	2	4,851	1	107	2	6,936	18,570	38	23	6
Jamaica	0	4,031	1	116	2	8,875	8,875	-	29	2
Japan	11	17,322	5	184	27	92,812	101,433	28	305	33
Korea, South	2	6,039	57	247	4	37,858	52,142	47	125	17
_ebanon	0	1,131	-	12	_	7,085	7,085	-	23	2
Mexico	160	20,161	1,046	6,377	100	303,097	303,097	_	997	99
Montenegro	-		-	-	_	_	-	_	-	
Morocco	_	4,419	_	1	_	13,818	13,818	_	45	4
Mozambique	-	608	-	0	-	1,159	1,159	-	4	
Netherlands	36	1,703	10	580	10	57,494	80,998	77	189	26
Netherlands Antilles	_	-	-	-	_	_	-	-	-	
New Zealand	0	557	34	9	0	608	608	-	2	
Nicaragua	0	-	0	56	_	3,054	3,854	3	10	1
Nigeria	_	-	-	798	-	2,152	2,152	-	7	
Norway	0	934	1	4		9,482	10,832	4	31	3
Pakistan	0	0	1	5		7	7	-	0	
Panama	0	_	185	407	114	35,096	36,221	4	115	11
Peru	1	360	2	662		32,512	34,231	6	107	11
Philippines	1	1,126	_	11	2	2,469	2,469	-	8	
Portugal	0	1,242	-	1	_	2,650	2,650	_	9	
Puerto Rico	1	0	2	136	0	2,566	2,566	-	8	
Romania	0	191	_	1	_	503	503	-	2	
Saudi Arabia	1	546	2	80	0	707	707	-	2	
Serbia	_	-	_	_	_	-		-	-	0.0
Singapore	2	397	0	756		57,556	66,874	31	189	22
South Africa	1	310	1	662		3,151	3,651	2	10	1
Spain	4	5,992	30	10		14,529	19,681	17 2	48	6
Switzerland Taiwan	29	233	5	68		782	1,402 3,339	3	8	1
	29	233	12	40		2,291 479	3,339	8	8	1
Thailand Trinidad and Tobago	0	1	0	77	0	132	700	2	0	'
Turkey	0	15,584	0	181	0	19,861	20,369	2	65	6
United Arab Emirates	0	306	3	417	0	2,199	2,199	2	7	C
United Kingdom	2	885	2	91	0	25,795	50,222	80	85	16
Venezuela	0	259	2	920	0	22,125	22,125		73	7
Other	15	6,566	303	681	19	72,596	83,062	34	240	27
		2,000	330			2,000	23,002			
	1,244	181,490	5,286	34,496	345	1,559,299	1,874,311	1,036	5,129	

Note: Totals may not equal sum of components due to independent rounding. Sources: U.S. Census Bureau and EIA estimates.

<sup>=</sup> No Data Reported.

1 On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2017 (Thousand Barrels per Day)

					Finis	hed Motor Gas	soline	Motor Gasol	line Blending Co	omponents
Country of Origin	Crude Oil <sup>1</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
0050	0.000	00		104		04	0.1			
OPEC	2,892	-23	_	124	_	-31	-31	_	51	51
AlgeriaAngola	124	-	-	144	_	_	_	_	-	_
Ecuador	163	-23	_	0	_	-21	-21	_	_	_
Equatorial Guinea	34	0	_	_		-21	-21			_
Gabon	20	_	_	_	_	_	_	_	_	_
Iran	_	_	_	_	_	_	_	_	_	_
Iraq	708	_	_	_	_	_	_	_	_	_
Kuwait	113	_	_	_	_	0	0	_	_	_
Libya	176	_	_	_	_	_	_	_	_	_
Nigeria	430	_	-	0	_	-11	-11	_	10	10
Qatar	_	_	_	0	_	_	-	_	_	_
Saudi Arabia	563	-	_	0	-	-	-	-	-	-
United Arab Emirates	50	0	-	12	-	0	0	-	0	0
Venezuela	510	-	_	-31	_	-	_	_	41	41
Non-OPEC	2,988	-1,259	25	323	_	-668	-668	160	175	335
Argentina	_	0	_	0	_	-22	-22	_	-	_
Aruba	_	-	_	-	_	-2	-2	_	_	
Australia	-	-47	-	0	-	0	0	0	-	0
Bahamas	-46	-1	-	-	-	-2	-2	-	-	-
Bahrain	-	-	-	_	-	_	_	-	-	-
Belgium	-		_	53	-	0	0	-	-	_
Brazil	173	-65	_	-1	-	-64	-64	_	1	1
Brunei	-	-	_	-	-	-	-	-	-	_
Cameroon		0	-	-	-	_	_	-	0	0
Canada	3,035	4	19	-24	_	3	3	115	50	165
Chad	34	- 042	-	- -25	-	-	- 10	_	-	_
China	-448	-243	_		_	-13	-13	_	7	_
Colombia	232 19	0	_	-13 12	_	-30	-30	_	0	7
Denmark  Dominican Republic	19	- -27	_	-1	_	-15	-15	_	-2	-2
Estonia	_	-21	_	-1	_	-13	-15	_	-2	-2
Finland	_		_	3	_	9	9	_	6	6
France	-120	-8		4		<i>3</i>	_		32	32
Germany	-120	0	_	0	_	3	3	_	3	3
Guatemala	8	-14	_	0	_	-36	-36	_	_	_
Honduras	_	-15	_	Ö	_	-12	-12	_	_	_
India	-27	-53	_	0	_	-	-	0	19	19
Indonesia	43	-45	_	_	_	_	_	_	-	-
Italy	-83	_	_	-16	_	-	_	_	29	29
Japan	-32	-273	_	0	_	0	0	0	_	0
Korea, South	-48	-63	-	-3	-	-5	-5	-	-	-
Latvia	_	-	_	-	-	_	-	-	-	-
Lithuania	_	-	_	_	_	_	_	_	_	_
Malaysia	-2	_	_	13	_	_	_	_	2	2
Mexico	616	-156	1	-14	_	-405	-405	0	-62	-62
Netherlands	-181	-37	_	0	_	-8	-8	_	11	11
Netherlands Antilles	_	-	_	_	_	_	_	_	_	
Norway	28	-28	_	12	_	_	_	_	10	10
Oman	62	-	_	0	-	_	_	_	-	
Panama	_	-3	_	7	_	-10	-10	_	_	_
Portugal	-	-13	_	4	_	_	_	_	9	9
Puerto Rico	-	-1	_	0	_	-3	-3	0	0	0
Russia	18		_	253	_	1	1	_	32 9	32
Spain	-40 _	-5 -11	_	17 2	_	_	_	_	9	9
Sweden	- -18	-11	_	0	_	0	0	_	_	_
Trinidad and Tobago United Kingdom	-18 -125	-38	_	2	_	9	9	- 45	2	48
Vietnam	-125	-36	_	0	_	9	9	45		40
Virgin Islands, U.S	_	0	_	U	_	0	0	_	-4	-4
Yemen	_		_	_	_	U	U	_	-4	-4
Other	-110	-119	5	38	_	-66	-66	0	21	20
5.1101	'''	119	3	30	_				'	20
Total	5,880	-1,282	25	447	_	-700	-700	160	226	386
		-								
Persian Gulf <sup>2</sup>	1,434	0	-	12	_	0	0	_	0	0

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2017 (Thousand Barrels per Day) — Continued

	Oxyge	nates		Renewal	ole Fuels			Di	stillate Fuel (	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC	0		-2	0			-51				-51
Algeria	-	_	-2		_	_	-51	_	_	_	-51
Angola	_	_	_	_	_	_	_	_	_	_	_
Ecuador	_	_	_	_	_	_	-51	_	_	_	-51
Equatorial Guinea	-	-	-	-	_	-	-	_	-	-	_
Gabon	-	-	-	-	-	-	-	_	-	-	-
Iran	-	_	_	_	_	_	_	_	_	_	_
Iraq	-	_	_	_	_	_	0	_	_	-	0
Kuwait	-	-	-	_	_	_	-	_	-	-	-
Libya	-	_	- 0	_	_	_	_	_	_	_	_
Nigeria Qatar	_	_	U	_ 0	_	_	_	_	_	_	
Saudi Arabia	0	_	-1	_	_	_	_	_	_	_	
United Arab Emirates	_	_		_	_	_	0	_	_	_	0
Venezuela	_	_	0	_	_	_	0	_	_	_	0
	24	20	60	_	10		1 000	07	106	4	
Non-OPEC	-34	<b>-28</b> 0	-68 -	5	12	_	<b>-1,092</b> -24	-87 -	-106 -	4	<b>-1,282</b> -24
Aruba			_	_	_	_	-26	_	0	_	-24
Australia	_	0	0	_	_	_	_	_	_	_	_
Bahamas	_	_	_	_	_	_	-3	_	-11	_	-14
Bahrain	_	_	_	_	_	_	0	_	_	_	0
Belgium	-	0	0	_	_	_	-15	_	-3	_	-18
Brazil	3	4	-8	_	_	_	-291	_	-10	-	-301
Brunei	-	-	-	-	-	-	-	-	-	-	_
Cameroon	-	_	_	_	_	_	-	-	_	_	-
Canada	-	0	-26	4	_	_	110	-13	-2	4	100
Chad	0	0	0	_	_	_	0	_	_	_	0
Colombia	_	0	-2	_	_	_	-15	_	_	_	-15
Denmark	_	_	_	_	_	_	-	_	_	_	-
Dominican Republic	_	_	0	_	_	_	-10	-8	-7	_	-24
Estonia	-	-	-	-	-	-	_	_	-	-	-
Finland	-	-	-	_	_	_	-	_	-	-	-
France	-	0	-	_	_	-	-49	-	-	-	-49
Germany	0	0	-	2	_	_	-21	_	_	-	-21
Guatemala	-	0	_	_	_	_	-30 -2	-23 -11	_	_	-54 -13
HondurasIndia	0	0	-10	_	_	_	-2	-11	_	_	-13
Indonesia	_	0	-10	_	_	_	_	_	_	_	_
Italy	_	_	_	_	_	_	_	_	_	_	_
Japan	_	-32	0	_	_	_	0	_	_	_	0
Korea, South	-	0	0	_	_	_	0	_	-3	_	-3
Latvia	_	_	_	-	-	-	-	_	-	_	-
Lithuania		_	_	_	_	_	_	_	_	_	_
Malaysia	-28	0	-3	_ 0	_	_	-255	- -11	-16 -1	_	-16 -267
Mexico Netherlands	-20	-	-3	_	_	_	-255	-11	-1	_	-207 -42
Netherlands Antilles	_	_	-2	_	_	_	-40	-2	_	_	-42
Norway	_	_	_	_	_	_	_	_	_	_	-
Oman	-	-	-	-	-	-	0	-	-	-	0
Panama	_	0	-	_	-	-	-35	-10	-	-	-45
Portugal	-	_	_	_	_	_	_	_	_	-	_
Puerto Rico	_	0	0	0	_	_	-22	0	=	_	-22
Russia	-	_	- -10	_	_	_	-20	0	7	_	7
SpainSweden	_		-10	_	_	_	-20	_	_	_	-20
Trinidad and Tobago	_	_	_	_	_	_	0	_	0	_	0
United Kingdom	_	0	0	_	_	_	-32	_	_	_	-32
Vietnam	_	0	_	_	_	_	0	_	_	_	0
Virgin Islands, U.S	-	-	0	-	-	_	0	_	-	-	0
Yemen	_	-	-	-	_	-	-	-	-	-	_
Other	-9	0	-7	-1	12	-	-312	-9	-60	0	-383
Total	-34	-28	-70	5	12	_	-1,143	-87	-106	4	-1,333
Persian Gulf <sup>2</sup>	0	_	-1	0	_	_	0	_	_	_	0
1 51 31011 GUII	υį	_	-1	ı	_	_	U	_	_	_	U

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2017 (Thousand Barrels per Day) — Continued

							Petrochemical Feedstocks		
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Naphtha	Other Oils	
DPEC	0	_	_	25	_	-17	_		
Algeria	_	_	_		_	-	_		
Angola	-	-	-	-	-	-	_		
Ecuador	_	_	_	0	_	-17	_		
Equatorial Guinea	-	-	-	-	-	-	-		
Gabon	-	-	-	-	-	-	-		
Iran	_	_	-	-	_	-	_		
Iraq	0	-	-	-	-	-	-		
Kuwait	-	-	-	6	-	-	-		
Libya	0	-	-	-	-	-	-		
Nigeria	_	-	-	-	-	-	-		
Qatar	-	-	-	_	-	-	-		
Saudi Arabia	-	-	-	9	-	-	-		
United Arab Emirates	0	-	-	-	-	-	-		
Venezuela	-	-	-	11	-	-	-		
on-OPEC	3	o		48	16	-184	43		
Argentina	3	U	_	48	16	-1 <b>84</b> 8	43		
Aruba	0	_	_	-2	_	_			
Australia				-2	_				
Bahamas	_	_	_	-2	_	-1	_		
Bahrain	_	_	_	-	_	-	_		
Belgium	-	_	-	-	1	0	0		
Brazil	-	_	_	-	_	_	_		
Brunei	-	_	-	-	-	-	_		
Cameroon	-	-	-	-	-	-	_		
Canada	-7	0	-	0	4	-5	3		
Chad	-	-	-	-	-	-	-		
China	0	_	-	16	-	0	-		
Colombia	-	-	-	-	-	0	14		
Denmark	-	-	-	-5	-	-	-		
Dominican Republic	-	-	-	-5	-	-	-		
Estonia	_	-	-	-	-	-	-		
Finland	-	-	-	-	-	-	-		
France	-	-	-	-	-	-	-		
Germany	_	-	-	-	1	-	0		
Guatemala	0	_	-	-2	-	0	-		
Honduras	-	-	_	-2 23	_	-7	_		
IndiaIndonesia	_	_	_	23	_	_	_		
Italy	_	_	_	_	1	_	0		
Japan	10	_	_	10	3	0	2		
Korea, South	-	_	_	105	3	_	_		
Latvia	_	_	_	-	_	_	_		
Lithuania	_	_	_	_	_	_	_		
Malaysia	0	_	_	11	_	_	_		
Mexico	0	_	-	-34	-	2	10		
Netherlands	-	_	-	-8	2	-14	_		
Netherlands Antilles	-	-	-	-	-	-	-		
Norway	-	_	_	-	_	_	-		
Oman	-	-	-	-	-	-	-		
Panama	0	-	-	-21	-	-19	-		
Portugal	-	-	-	-	-	-	-		
Puerto Rico	0	-	-	0	-	-	_		
Russia	-	-	-	9	-	33	2		
SpainSweden	-	-	-	-	_	-	-		
Trinidad and Tobago	0	-	-	0	-	32	-		
United Kingdom	0		-	-14	_	32	1		
Vietnam	0	_	_	-14	_	_	1		
Virgin Islands, U.S	0	_	_	_	_	-11			
Yemen		_	_	_	_		_		
Other	0	0	_	-31	1	-202	11		
	١	"		3.					
otal	3	0	_	73	16	-202	43		
					-	-			
ersian Gulf <sup>2</sup>	0	_	_	15	_	_	_		

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2017 (Thousand Barrels per Day) - Continued

Country of Origin	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellanous Products	Total Products	Total Crude Oil and Products
OPEC	0	-12	0	0	0	65	2,957
Algeria	_	-	_	0	_	144	144
Angola	-	-	-	-	-	-	124
Ecuador	0	-6	0	-1	-	-119	44
Equatorial Guinea	-	-	-	0	_	0	34
Gabon	-	-	-	-	-	-	20
IranIraq	_	_	_	0	_	0	708
Kuwait	_	0	0	0	_	6	119
Libya	-	_	_	0	-	0	176
Nigeria	-	-	_	-5	-	-5	425
Qatar	-	-4	-	9	_	5	5
Saudi Arabia	0	0	0	0	0	7	570
United Arab Emirates Venezuela	0	0 -2	-	-4	_	13	64 525
venezuela		-2	_			13	323
Non-OPEC	1	-686	6	-63	-1	-3,447	-459
Argentina	0	3	-2	0	_	-37	-37
Aruba	-	-	_	0	-	-31	-31
Australia	0	-7	0	-1	-	-55	-55
Bahamas	-	_	0	0	_	-19 0	-66 0
Bahrain Belgium	_	- -3	0	-10	0	22	22
Brazil	0	-23	0	-10	0	-464	-291
Brunei	_	0	_	0	_	0	0
Cameroon	-	-	-	0	-	0	0
Canada	-2	-25	18	0	0	236	3,270
Chad	_	-	_	_	_	-	34
China	2	-81 0	0	-1 -3	0	-345	-793 189
Colombia  Denmark	_	-3	0	-3 0	_	-42 4	24
Dominican Republic	0	-6	-1	0	0	-81	-81
Estonia	-	-	-	0	_	0	0
Finland	-	-	-	2	-	20	20
France	0	-8	-	-2	0	-30	-150
Germany Guatemala	0	0 -5	0	-1 -1	0	-14 -112	-14 -104
Honduras	0	-o -	-1 -1	-1 0	_	-112	-104
India	0	-153	0	-1	0	-176	-202
Indonesia	0	-	0	2	0	-43	0
Italy	0	-20	0	0	0	-5	-89
Japan	1	-53	0	-1	0	-332	-364
Korea, South	0	-9	0	8	0	34	-15
Latvia Lithuania	-	_	_	-	_	_	_
Malaysia	1	_	0	0	- 0	_ 11	9
Mexico	-1	-101	-5	-23	0	-1,086	-469
Netherlands	0	-5	0	0	-	-103	-284
Netherlands Antilles	-	-	-	_	-	_	-
Norway	-	-4	_	0	-	-11 -2	17
Oman Panama	_	-2 -	- -1	-6	_	-2 -97	60 -97
Portugal	_	_	-1	-0	_	-97	0
Puerto Rico	_	_	_	-1	0	-26	-26
Russia	-	-	-	0	_	337	355
Spain	0	-8	1	0	-	-16	-55
Sweden	0	-	-	0	0	-9	-9
Trinidad and Tobago	_ 0	0	0	0	0	34	15
United Kingdom Vietnam	0	0	0	-1 0	0	-24	-150 0
Virgin Islands, U.S		_	0	0	0	-15	-15
Yemen	_	_	_	0		0	0
Other	0	-173	-3	-13	-1	-919	-1,026
Total	1	-698	6	-63	-1	-3,382	2,498
Persian Gulf <sup>2</sup>	o	-4	0	10	0	31	1,466

<sup>=</sup> No Data Reported.

1 On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2017 (Thousand Barrels per Day)

					Finis	hed Motor Gas	soline	Motor Gasol	ine Blending Co	omponents
Country of Origin	Crude Oil <sup>1</sup>	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Reform- ulated	Conven- tional	Total	Reform- ulated	Conven- tional	Total
OPEC	3,191	-16	_	120	_	-40	-40	0	37	3
Algeria	76	-	_	120	_	-	-	_	0	J
Angola	131	_	_	3	-	_	_	_	3	
Ecuador	203	-15	_	-1	_	-23	-23	0	-2	-
Equatorial Guinea	14	0	-	-	-	-	-	_	-	
Gabon	5	-	-	2	-	-	-	-	-	
Iran	-	-	_	-	_	-	_	_	-	
Iraq	601	-	-	4	-	-	_	-	-	
Kuwait	154	0	-	-	-	0	0	-	0	
Libya	56	0	-	6	-	_	_	-	-	
Nigeria	297	-	_	5	-	-3	-3	-	19	1
Qatar	985	0	_	0 2	_	0	0	_ 0	-	
Saudi Arabia United Arab Emirates	985	-1	_	9	_	0	0	0	0	
Venezuela	648	-1	_	-28	_	-14	-14	0	17	1
Non-OPEC	3,726	-1,199	29	253	_	-605	-605	217	312	52
Argentina	-5	0		-2	_	-7	-7		3	
Aruba	_	-24	-	0	-	-1	-1	-	0	
Australia	1	-19	_	0	_	0	0	0	0	
Bahamas	-21	-1	_	-1	-	-5	-5	0	0	
Bahrain	-	-	_	-	-	0	0	0	-	
Belgium	-	-2	0	36	-	1	1	3	8	1
Brazil	198	-54	_	-10	-	-31	-31	-	2	
Brunei	1	-	_	-	-	_	_	-	_	
Cameroon	2 100	0	- 25	1	-	0	0	-	0	
Canada Chad	3,100 20	-112	25	-59	_	ı		114	54	16
China	-209	-146	_	-10	_	-2	-2	0	0	
Colombia	312	0	_	-35	_	-27	-27	-	7	
Denmark	2	_	_	3	_	-1	-1	0	1	
Dominican Republic	-4	-32	_	0	_	-12	-12	0	-1	-
Estonia	-	-	_	0	-	-	_	-	0	
Finland	_	-	_	1	-	1	1	0	8	
France	-28	-11	_	3	-	0	0	15	12	2
Germany	-2	0	_	2	-	1	1	1	1	
Guatemala	10	-12	-	0	-	-38	-38	-	-1	
Honduras	-	-11	_	0	-	-11	-11	-	-2	
IndiaIndonesia	-23 13	-54 -16	_	12 0	_	0	0	2 0	59	6
Italy	-38	-10	_	1	_	1	1	1	12	1
Japan	-28	-209	_	-8	_	-1	-1	0	2	
Korea, South	-47	-93	_	-4	_	-1	-1	0	9	
Latvia	-	-	_	-	_	-	-	-	0	
Lithuania	-	-	-	0	-	_	_	-	4	
Malaysia	-18	_	_	2	_	-2	-2	_	1	
Mexico	576	-124	1	-15	-	-376		0	-38	-3
Netherlands	-77	-39	_	-9	-	-3	-3	11	24	3
Netherlands Antilles	-	-	-	-	-		-	-	-	
Norway	38	-25	-	23	-	1	1	4	9	1
Oman	10	-	_	-3	-	-23	-23	-	-	
Panama	-4	-10 -5	_	1 0	_	-23	-23	4	-1 22	2
Puerto Rico	_	-5	_	0		-1	-1	0	0	2
Russia	- 50	0	_	269	_	1	1	1	42	4
Spain	-17	-11	_	11	_	0		0	33	3
Sweden	-	0	-	5	-	1	1	0	4	
Trinidad and Tobago	6	1	_	4	_	0	0	0	2	
United Kingdom	-59	-38	_	4	_	5	5	60	24	8
Vietnam	1	-	_	0	-	-	_	0	0	
Virgin Islands, U.S	-	-3	_	-	-	-3		-	-1	
Yemen	3	-	_	-	-	0		-	-	
Other	-35	-148	3	31	-	-74		1	13	1
Total	6,917	-1,215	29	373	-	-645		217	348	56
Persian Gulf <sup>2</sup>	1,761	-1	_	14	-	0	0	0	0	

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2017 (Thousand Barrels per Day) — Continued

	Oxyge	enates		Renewal	ole Fuels			Di	istillate Fuel (	Dil	
Country of Origin	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygen- ates	Fuel Ethanol	Biomass- Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC	-5	0	-4	0	_	_	-36	-10	-4	_	-50
Algeria	-5	-	-4	_	_	_	-30	-10	-1	_	-2
Angola	_	_	_	_	_	_	_	_	_	_	=
Ecuador	-	0	0	_	-	-	-27	-8	-1	-	-35
Equatorial Guinea	-	_	_	_	_	_	_	_	_	_	-
Gabon	-	-	_	_	_	_	_	_	_	-	-
Iran	-	_	-	_	_	_	_ 0	_	_	-	_
Iraq Kuwait	-	- 0	0	_	_	_	U	_	_	_	0
Libya		0	-	_	_	_	_	_	_	_	
Nigeria	_	_	-1	_	_	_	1	_	_	_	1
Qatar	_	_	0	0	_	_	0	_	_	_	0
Saudi Arabia	0	0	0	_	_	_	0	-	_	-	0
United Arab Emirates	-	0	-3	_	_	_	0	-	_	-	0
Venezuela	-5	0	0	-	-	-	-10	-1	-2	-	-13
		<u>.</u>								_	
Non-OPEC	-26	-26	-77	21	13	_	-1,038	-105	-54	4	-1,193
Argentina	1	0	0	23	_	_	-34 -7	-2	-4 0	_	-41
ArubaAustralia	_	0	0	_	_	_	-/ -1	_	0	_	-7 -1
Bahamas	_	0	0	_	_	_	-4	0	-10	_	-15
Bahrain	_	_	0	_	_	_	0	_	-	_	0
Belgium	1	0	Ö	0	_	_	-7	-1	-2	1	-9
Brazil	1	4	-25	0	_	_	-193	-13	0	_	-206
Brunei	-	_	-	_	-	-	0	-	-	-	0
Cameroon	_	_	-	0	_	_	_	-	_	-	_
Canada	-	0	-22	-1	1	_	75	-12	19	1	83
Chad	-	_	_	_	_	_	_	-	_	-	_
China	0	0	0	0	_	_	1	_	0	-	1
Colombia  Denmark	-	0	-1	_	_	_	-19 0	0	0	_	-19 -1
Dominican Republic		_	0	_	_	_	-8	-2	-2	_	-12
Estonia	_	_	_	_	_	_	_	_	_	_	'-
Finland	_	_	_	_	_	_	-1	_	_	_	-1
France	-	0	0	_	_	_	-59	-1	-1	0	-61
Germany	1	0	0	0	_	_	-4	_	_	-	-4
Guatemala	-	0	0	_	_	_	-40	-13	-2	-	-56
Honduras	_	_	0	_	-	_	-8	-5	0	_	-14
India	0	0	-11 0	_	_	_	8	_	0	0	9
IndonesiaItaly		0	0	0	_	_	-3	0	_	_	-3
Japan	_	-30	0		_	_	1	_	_	_	-5
Korea, South	0	0	-2	0	_	_	2	_	-3	_	-1
Latvia	_	_	_	_	_	_	_	_	_	-	-
Lithuania	_	_	_	_	_	_	_	_	_	_	-
Malaysia	_	0	0		_	-	0	-	-9	_	-8
Mexico	-25	0	-2	0	_	_	-231	-4	-1	_	-236
Netherlands	3	0	-1	0	_	_	-80	-7	-2	-	-89
Netherlands Antilles	_	0	0	0	_	_	0	_	_	_	0
Norway			-1	_	_	_	0	_	_	_	0
Panama	_	0	0	0	_	_	-37	-6	-2	_	-45
Portugal	-	-	-	-	-	-	_	-	-	-	-
Puerto Rico	_	0	-1	0	_	-	-5	-1	0	-	-6
Russia	_	0	_	_	_	_	0	0	2	1	3
Spain	_	_	-1	0	_	_	-12	-1	-2	-	-15
Sweden	-	- 0	0	0	_	_	0	_	0	-	0
Trinidad and Tobago United Kingdom	0	0	0		_	_	-36	0	-1	_	-37
Vietnam	-	0	_		_	_	-30	_	-1	_	-37
Virgin Islands, U.S.	_		0	_	_	_	-10	-1	-7	_	-18
Yemen	_	_	_	_	_	_	_	_	_	_	_
Other	-8	0	-10	-1	12	-	-326	-36	-28	1	-386
Total	-31	-26	-81	21	13	_	-1,074	-115	-57	4	-1,243
Danaian Ou II'	اء	_	_	_							_
Persian Gulf <sup>2</sup>	0	0	-3	0	_	_	0	_	-	-	0

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2017 (Thousand Barrels per Day) — Continued

			Aviation				Petrochemical Feedstocks		
Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene- Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Naphtha	Other Oils	
PEC	o	_	_	16	o	3	1		
Algeria	_	_	_	-	_	1	i		
Angola	-	-	-	-	-	-	-		
Ecuador	-	_	_	0	_	-12	_		
Equatorial Guinea	-	-	-	-	-	-	-		
Gabon	-	-	-	-	-	-	-		
Iran	-	-	-	-	-	-	-		
Iraq	0	-	-	0	-	-	-		
Kuwait	-	-	-	1	-	0	-		
Libya	0	-	-	-	-	2	-		
Nigeria	-	-	-	0	-	-	-		
Qatar	_	-	-	-	_	-	-		
Saudi Arabia United Arab Emirates	0	-	-	2	0	0	-		
Venezuela	U	_	_	12	-	12	_		
v GI IGZUGIA	-	-	-	12	-	12	-		
on-OPEC	-1	o	_	-44	14	-122	31		
Argentina	0			-2	-	2	-		
Aruba	0	_	_	-1	_	-3	_		
Australia	_	_	_	_	_	_	_		
Bahamas	-	-	-	-1	_	-11	_		
Bahrain	_	_	-	_	_	_	_		
Belgium	-	-	-	-	0	0	0		
Brazil	0	-	-	-6	1	0	-		
Brunei	-	-	-	-	-	-	-		
Cameroon	-	-	-	-	-	-	-		
Canada	-3	0	-	-17	5	-5	2		
Chad	-	-	-	0	-	-	-		
China	1	-	-	13	-	-6	-		
Colombia	0	-	-	-3	-	6	6		
Denmark	-	-	-	-2	-	-	-		
Dominican Republic	0	-	-	-6	-	-1	-		
Estonia	0	-	-	-  -1	-	-	-		
Finland	0	_	_	-3	0	1	0		
Germany	0		_	-5	0	0	0		
Guatemala	0	_	_	-3	_	-4	_		
Honduras	0	_	_	-2	_	-9	_		
India	0	_	_	8	_	1	_		
Indonesia	_	_	_	0	_	-	_		
Italy	-	-	-	0	0	1	0		
Japan	3	-	-	16	3	0	1		
Korea, South	0	-	-	81	3	0	0		
Latvia	-	-	-	-	-	-	-		
Lithuania	_	_	-	-	_	-	-		
Malaysia	0	-	-	1	-	-	-		
Mexico	0	_	-	-39	1	20	10		
Netherlands	0	0	-	-8	0	-7	0		
Netherlands Antilles	-	-	-	-	-	-	-		
Norway	_	_	_	-	_	_	-		
Panama	0	_	_	-18	_	-16	_		
Portugal		_	_	-10	0	-10	_		
Puerto Rico	0	_	_	0	_	0	_		
Russia	0	-	-	1	-	18	1		
Spain	_	_	_	0	_	0	_		
Sweden	-1	-	-	0	-	1	-		
Trinidad and Tobago	0	-	_	0	-	17	-		
United Kingdom	-	_	-	-3	-	-2	2		
Vietnam	0	-	-	0	-	0	-		
Virgin Islands, U.S	0	-	-	-2	-	-10	-		
Yemen	-	_	-	-	-		_		
Other	-1	0	-	-47	1	-115	9		
otal	-1	0	-	-28	14	-119	32		

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2017 (Thousand Barrels per Day) - Continued

Country of Origin	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellanous Products	Total Products	Total Crude Oil and Products
OPEC	o	-8	3	-1	0	57	3,248
Algeria	_	-	0	1	_	121	197
Angola	-	-	0	0	-	5	136
Ecuador	0	-4	0	-1	0	-93	110
Equatorial Guinea	-	-	-	0	-	0	14
Gabon	-	-	0	0	-	2	7
Iran	-	-	_ 0	0	-	0	0
Iraq Kuwait	0	0	0	0	0	1	605 154
Libya	_	-	-	0	-	8	64
Nigeria	-	_	_	-3	_	18	315
Qatar	0	-1	-	5	-	4	4
Saudi Arabia	0	-2	0	0	0	2	986
United Arab Emirates	0	-1	0	0	0	5	26
Venezuela	0	0	4	-3	0	-19	629
Non-OPEC	1	-579	18	-71	-1	-3,021	705
Argentina	0	2	-1	-9	0	-29	-34
Aruba	-	_	0	0	-	-37	-37
Australia	0	-6	0	0	0	-27	-26
Bahamas	0	_	0	-1	0	-35	-55
Bahrain	0	-	_	2	_	2	2
Belgium	0	-6 -36	0	-9 -8	0	23	23
Brazil Brunei	0	-36	0	-8 0	0	-367 0	-169 1
Cameroon	0	-	0	0	_	1	1
Canada	-1	-18	23	1	0	77	3,177
Chad	-	-	-	0	_	0	20
China	1	-57	0	-2	0	-207	-416
Colombia	0	1	0	-3	0	-69	243
Denmark	0	-2	0	-1	_ 0	-2	0
Dominican Republic	0	-3 1	-1 -	-1 0	0	-68 1	-72 1
Finland	0	-1	0	0	0	7	7
France	0	-6	0	-2	0	-51	-79
Germany	0	-1	0	-2	0	-2	-4
Guatemala	0	-6	0	-1	1	-120	-110
Honduras	0	-5	0	0	-	-55	-55
IndiaIndonesia	0	-103 0	0	-2 2	0	-80 -14	-103 -1
Italy	0	-16	0	0	0	-4	-42
Japan	0	-57	0	-1	0	-278	-307
Korea, South	0	-20	0	12	0	-16	-63
Latvia	0	-	-	0	0	0	0
Lithuania	0	_	-	0	_	4	4
Malaysia	0	-2	1	0	0	-7	-25
Mexico Netherlands	0	-66 -6	-3 0	-21 -2	0	-916 -124	-340 -202
Netherlands Antilles	_	-	-	_	-	-	_
Norway	0	-3	0	0	0	17	55
Oman	0	-1	0	0	-	-5	5
Panama	0	-	-1	-1	0	-115	-118
Portugal	0	-4	-	0	-	18	18
Puerto Rico	0	0	0	0	0	-8 336	-8 387
Spain	0	-20	4	0	0	3	-14
Sweden	0	0	-	0	0	10	10
Trinidad and Tobago	0	0	0	0	0	26	32
United Kingdom	0	-2	0	0	0	12	-47
Vietnam	0	-3	0	0	0	-3	-2
Virgin Islands, U.S	-	-	0	0	0	-37	-37
Yemen Other	_ 2	- -133	- -4	0 -22	- -1	-882	-918
Julio1			-4	-22	-1	-002	
Total	1	-587	22	-73	-1	-2,965	3,953
Persian Gulf <sup>2</sup>	0	-4	0	7	0	17	1,777

<sup>1</sup> On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require

<sup>&</sup>lt;sup>2</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding. Sources: U.S. Census Bureau and EIA estimates.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2017 (Thousand Barrels)

Refinery	13,740 11,119 2,621 	2  153,755 14,071 139,684 65,122 178,973 49,607 94,021 33,438 1,907 63,361 4,817 41,929 14,708 1,907 6,749 3,747 2,756 246 246 26,150	3  887,456 45,459 173,046	20,685 2,373 18,312 20,256 9,917 6,425 3,769 145 4,430 473 1,947 1,865 145 420	5  52,377 24,394 23,086 4,897 87,998 50,270 32,512 4,663 553 6,096 1,858 3,674 11 553	1,128,01: 97,41: 356,74: 65,12: 668,95 4,89 815,21: 252,43: 436,75: 118,98: 7,03: 225,22: 15,98: 170,20: 31,99:
Refinery	11,119 2,621 	14,071 139,684 65,122 178,973 49,607 94,021 33,438 1,907 63,361 4,817 41,929 14,708 1,907 6,749 3,747 2,756 246	45,459 173,046 ————————————————————————————————————	2,373 18,312	24,394 23,086 - - - 4,897 <b>87,998</b> 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	97,41 356,74 65,12 
Refinery	11,119 2,621 	14,071 139,684 65,122 178,973 49,607 94,021 33,438 1,907 63,361 4,817 41,929 14,708 1,907 6,749 3,747 2,756 246	45,459 173,046 ————————————————————————————————————	2,373 18,312	24,394 23,086 - - - 4,897 <b>87,998</b> 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	97,41 356,74 65,12 
Cushing, Oklahoma Leases  Strategic Petroleum Reserve <sup>1</sup> Alaskan In Transit  Total Stocks, All Oils (excluding Crude Oil) <sup>2</sup> Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal		65,122  178,973 49,607 94,021 33,438 1,907 63,361 4,817 41,929 14,708 1,907 6,749 - 3,747 2,756 246			- 4,897 <b>87,998</b> 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	65,12 - 668,95 4,89 <b>815,21</b> 252,43 436,75 118,98 7,03 <b>225,22</b> 15,98
Leases Strategic Petroleum Reserve1 Alaskan In Transit Total Stocks, All Oils (excluding Crude Oil)2 Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	- 150,021 15,427 107,406 26,937 251 9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	178,973 49,607 94,021 33,438 1,907 63,361 4,817 41,929 14,708 1,907 6,749	668,951 	20,256 9,917 6,425 3,769 145 4,430 473 1,947 1,865 145	- 4,897 <b>87,998</b> 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	668,95 4,89 <b>815,21</b> 252,43 436,75 118,98 7,03 <b>225,22</b> 15,98
Strategic Petroleum Reserve¹ Alaskan In Transit  Total Stocks, All Oils (excluding Crude Oil)² Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	- 150,021 15,427 107,406 26,937 251 9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	- 178,973 49,607 94,021 33,438 1,907 63,361 4,817 41,929 14,708 1,907 6,749 - 3,747 2,756 246	668,951 	20,256 9,917 6,425 3,769 145 4,430 473 1,947 1,865 145	- 4,897 <b>87,998</b> 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	668,95 4,89 <b>815,21</b> 252,43 436,75 118,98 7,03 <b>225,22</b> 15,98
Alaskan In Transit Total Stocks, All Oils (excluding Crude Oil)2  Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	15,427 107,406 26,937 251 9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	49,607 94,021 33,438 1,907 <b>63,361</b> 4,817 41,929 14,708 1,907 <b>6,749</b> - 3,747 2,756 246	377,964 127,214 196,393 50,178 4,179 141,790 8,280 114,672 14,659 4,179 51,088	9,917 6,425 3,769 145 <b>4,430</b> 473 1,947 1,865	87,998 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	4,89 815,21 252,43 436,75 118,98 7,03 225,22 15,98 170,20
Total Stocks, All Oils (excluding Crude Oil)2  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Natural Gas Liquids  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Ethane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Propane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Propane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Propane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Isobutane  Refinery  Bulk Terminal	15,427 107,406 26,937 251 9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	49,607 94,021 33,438 1,907 <b>63,361</b> 4,817 41,929 14,708 1,907 <b>6,749</b> - 3,747 2,756 246	127,214 196,393 50,178 4,179 141,790 8,280 114,672 14,659 4,179 51,088	9,917 6,425 3,769 145 <b>4,430</b> 473 1,947 1,865	87,998 50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	815,21 252,43 436,75 118,98 7,03 225,23 15,98 170,20
Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	15,427 107,406 26,937 251 9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	49,607 94,021 33,438 1,907 <b>63,361</b> 4,817 41,929 14,708 1,907 <b>6,749</b> - 3,747 2,756 246	127,214 196,393 50,178 4,179 141,790 8,280 114,672 14,659 4,179 51,088	9,917 6,425 3,769 145 <b>4,430</b> 473 1,947 1,865	50,270 32,512 4,663 553 <b>6,096</b> 1,858 3,674	252,43 436,75 118,98 7,03 <b>225,22</b> 15,98 170,20
Bulk Terminal Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	107,406 26,937 251 <b>9,545</b> 557 7,987 750 251 <b>373</b> 129 244 - <b>6,436</b> 1,546 -	94,021 33,438 1,907 <b>63,361</b> 4,817 41,929 14,708 1,907 <b>6,749</b> - 3,747 2,756 246	196,393 50,178 4,179 <b>141,790</b> 8,280 114,672 14,659 4,179 <b>51,088</b>	6,425 3,769 145 <b>4,430</b> 473 1,947 1,865 145	32,512 4,663 553 <b>6,096</b> 1,858 3,674	436,75 118,98 7,03 <b>225,22</b> 15,98 170,20
Pipeline Natural Gas Processing Plant Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	26,937 251 9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	33,438 1,907 <b>63,361</b> 4,817 41,929 14,708 1,907 <b>6,749</b> — 3,747 2,756 246	50,178 4,179 <b>141,790</b> 8,280 114,679 4,179 <b>51,088</b>	3,769 145 <b>4,430</b> 473 1,947 1,865 145	4,663 553 <b>6,096</b> 1,858 3,674	118,98 7,03 <b>225,22</b> 15,98 170,20
Natural Gas Liquids Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	9,545 557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	63,361 4,817 41,929 114,708 1,907 6,749 — 3,747 2,756 246	141,790 8,280 114,672 14,659 4,179 51,088	<b>4,430</b> 473 1,947 1,865 145	<b>6,096</b> 1,858 3,674 11	<b>225,22</b> 15,98 170,20
Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Refinery Bulk Terminal	557 7,987 750 251 373 - 129 244 - 6,436 154 5,676	4,817 41,929 14,708 1,907 <b>6,749</b> - 3,747 2,756 246	8,280 114,672 14,659 4,179 <b>51,088</b> 194	473 1,947 1,865 145	1,858 3,674 11	15,98 170,20
Bulk Terminal Pipeline Natural Gas Processing Plant Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	7,987 750 251 <b>373</b> - 129 244 - <b>6,436</b> 154 5,676	41,929 14,708 1,907 <b>6,749</b> - 3,747 2,756 246	114,672 14,659 4,179 <b>51,088</b> 194	1,947 1,865 145	3,674 11	170,20
Pipeline  Natural Gas Processing Plant  Ethane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Propane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Notral Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Isobutane  Refinery  Bulk Terminal	750 251 <b>373</b> - 129 244 - <b>6,436</b> 154 5,676	14,708 1,907 <b>6,749</b> - 3,747 2,756 246	14,659 4,179 <b>51,088</b> 194	1,865 145	11	
Natural Gas Processing Plant  Ethane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Propane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Isobutane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Isobutane  Refinery  Bulk Terminal	251 373 - 129 244 - 6,436 154 5,676 	1,907 <b>6,749</b> - 3,747 2,756 246	4,179 <b>51,088</b> 194	145		31 44
Ethane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Natural Fas Processing Plant Refinery Bulk Terminal	373 	6,749 - 3,747 2,756 246	<b>51,088</b> 194		333	7,03
Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Refinery Bulk Terminal	129 244 - <b>6,436</b> 154 5,676	3,747 2,756 246	194	720	ı _	7,03 <b>58,63</b>
Bulk Terminal Pipeline Natural Gas Processing Plant Propane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Refinery Bulk Terminal	244 - <b>6,436</b> 154 5,676 	2,756 246		_	_	19
Pipeline	244 - <b>6,436</b> 154 5,676 	2,756 246		_	_	48,32
Natural Gas Processing Plant Propane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Isobutane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant  Isobutane  Refinery  Bulk Terminal	- <b>6,436</b> 154 5,676	246	5,411	418	_	8,82
Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline Pipeline Refinery Bulk Terminal	154 5,676 	26.150	1,030	2	-	1,27
Bulk Terminal Pipeline Natural Gas Processing Plant Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal	5,676 		35,177	1,537	2,155	71,45
Pipeline		2,055	1,270	68	111	3,65
Natural Gas Processing Plant Normal Butane  Refinery  Bulk Terminal  Pipeline  Natural Gas Processing Plant Isobutane  Refinery  Bulk Terminal  Pipeline		19,315	27,381	662	1,978	55,01
Normal Butane Refinery Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline	400					
Refinery	128	890	1,511 <b>37,111</b>	56 <b>1,888</b>	55 <b>3,295</b>	2,64 <b>62,97</b>
Bulk Terminal Pipeline Natural Gas Processing Plant Isobutane Refinery Bulk Terminal Pipeline	<b>2,146</b> 272	<b>18,530</b> 2,021	4,857	293	1,165	8,60
Pipeline	1,820	15,254	29,482	1,277	1,690	49,52
Natural Gas Processing Plant	6	913	1,586	285	-	2,79
Refinery Bulk Terminal Pipeline	48	342	1,186	33	440	2,04
Bulk Terminal	156	2,478	7,085	259	597	10,57
Pipeline	131	477	1,508	100	578	2,79
Pipeline	_	1,156	4,528	_	-	5,68
	11	611	781	148	-	1,55
	14 <b>434</b>	234 <b>9,454</b>	268 <b>11,329</b>	11 <b>326</b>	19 <b>49</b>	54
Natural Gasoline	434	264	451	12	49	<b>21,59</b> 73
Bulk Terminal	362	2,457	8,828	8	6	11,66
Pipeline	11	6,538	1,866	263	_	8,67
Natural Gas Processing Plant	61	195	184	43	39	52
Refinery Olefins	377	1,618	4,422	9	126	6,55
Refinery	377	1,600	1,831	9	126	3,94
Bulk Terminal	-	18	2,591	-	-	2,60
Pipeline	-	-	-	-	-	
Natural Gas Processing Plant	-	-	_ 0	_	-	
Ethylene	_	-	0	_	_	
Bulk Terminal	_	_	-	_	_	
Pipeline	_	_			_	
Natural Gas Processing Plant	-	_	_	_	_	
Propylene	156	752	4,014	1	21	4,94
Refinery	156	734	1,423	1	21	2,33
Bulk Terminal	-	18	2,591	-	-	2,60
Pipeline	-	-	-	-	-	
Natural Gas Processing Plant	-		_	_		
Butylene	184	866	408	8	105	1,57
Refinery	184	866	408	8	105	1,57
Bulk Terminal	_	_	_	_	_	
Natural Gas Processing Plant	_	_	_	_		
Isobutylene	37	0	0	0	0	3
Refinery	37	0	0	0	0	3
Bulk Terminal	-	-	-	-	-	
Pipeline	-	_	_	-	_	
Natural Gas Processing Plant	-	-	_	_	-	
Other Hydrocarbons	-	31	-	_	-	3
Refinery	_	31		-	-	3
Oxygenates (excluding Fuel Ethanol)	-	7	1,481	_	-	1,48
Refinery Bulk Terminal	_	- 7	1,481	_	-	1,48
Pipeline	_	/	1,461			7 // 0

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2017 (Thousand Barrels) — Continued

Commodity		т	PAD Districts			U.S. Total
Commounty	1	2	3	4	5	0.0. 10.01
MTBE		_	1,140		_	1,14
Refinery	_	_	-	_	_	.,
Bulk Terminal <sup>3</sup>	_	-	1,140	_	-	1,14
Pipeline	_	_	, -	_	-	,
Other Oxygenates <sup>4</sup>	-	7	341	-	-	34
Refinery	-	-	-	-	-	
Bulk Terminal	-	7	341	-	-	34
Pipeline	-	-	-	-	-	
enewable Fuels (including Fuel Ethanol)	8,302	8,628	5,503	357	3,945	26,7
Refinery	140	128	410	96	163	9:
Bulk Terminal	8,162	8,500	5,093	258	3,782	25,79
Pipeline	-			3	-	A
Fuel Ethanol <sup>2</sup>	6,704	7,776	4,064	352	2,678	21,5
Refinery	134	91	186	92	31	50
Bulk Terminal	6,570	7,685	3,878	257	2,647	21,0
Pipeline	1 500	-	1 421	3	1 040	E 44
Renewable Diesel Fuel	1,598	<b>852</b> 37	<b>1,431</b> 224	5	<b>1,242</b> 132	5,1: 4
Refinery	1 500					
Bulk Terminal	1,592	815	1,207	1	1,110	4,7
Pipeline		_	8	-	25	;
Other Renewable Fuels	_	_	0	_	25	
Refinery Bulk Terminal		_	8	_	25	
Pipeline	_	_	0	_	20	
nfinished Oils	5,379	13,496	46,124	2,955	20,638	88,5
Naphthas and Lighter	1,388	3,083	12,002	622	3,599	20,6
Refinery	1,131	2,995	11,000	622	3,332	19,0
Bulk Terminal	257	2,333	1,002	022	267	1,6
Kerosene and Light Gas Oils	958	3,043	7,666	640	4,181	16,4
Refinery	620	3,043	7,568	640	4,006	15,8
Bulk Terminal	338	3,043	98	040	175	13,0
Heavy Gas Oils	2,299	4,777	21,269	1,140	10,337	39,8
Refinery	2,124	4,762	18,328	1,140	9,717	36,0
Bulk Terminal	175	15	2,941	1,140	620	3,7
Residuum	734	2,593	5,187	553	2,521	11,5
Refinery	734	2,360	5,187	553	2,495	11,3
Bulk Terminal	704	233	3,107	333	26	2
otor Gasoline Blending Components <sup>2</sup>	50,016	39,548	73,042	5,310	25,867	193,7
Refinery	4,956	12,930	27,871	2,950	13,848	62,5
Bulk Terminal	34,770	18,802	28,123	1,557	9,808	93.0
Pipeline	10,290	7,816	17,048	803	2,211	38,1
Reformulated - RBOB	17,832	4,889	11,112	_	12,387	46,2
Refinery	1,623	1,182	2,206	_	5,171	10,1
Bulk Terminal	11,629	2,727	4,687	-	5,814	24,8
Pipeline	4,580	980	4,219	_	1,402	11,1
Conventional	32,184	34,659	61,930	5,310	13,480	147,5
Refinery	3,333	11,748	25,665	2,950	8,677	52,3
Bulk Terminal	23,141	16,075	23,436	1,557	3,994	68,2
Pipeline	5,710	6,836	12,829	803	809	26,9
CBOB	24,170	27,312	32,272	3,764	6,597	94,1
Refinery	637	5,309	10,366	1,405	2,278	19,9
Bulk Terminal	17,823	15,643	9,152	1,556	3,515	47,6
Pipeline	5,710	6,360	12,754	803	804	26,4
GTAB	706	-	-	-	-	7
Refinery	-	-	-	-	-	
Bulk Terminal	706	-	-	-	-	7
Pipeline	-	-	-	-	-	
Other	7,308	7,347	29,658	1,546	6,883	52,7
Refinery	2,696	6,439	15,299	1,545	6,399	32,3
Bulk Terminal	4,612	432	14,284	1	479	19,8
Pipeline	-	476	75	-	5	Ę
viation Gasoline Blending Components	-	_	10	-	-	
Refinery	-	-	10	-	-	
Bulk Terminal	_	_	_	-	-	
nished Motor Gasoline	4,205	6,309	8,627	1,751	2,262	23,1
Refinery	33	1,463	4,339	669	833	7,3
Bulk Terminal	1,356	2,717	2,435	758	1,294	8,5
Pipeline	2,816	2,129	1,853	324	135	7,2
Reformulated	28	_	_	-	16	
Refinery	-	_	_	-	16	
Bulk Terminal	28	_	_	-	-	
Pipeline	-	_	_	-	-	
Reformulated (Blended with Fuel Ethanol)	28	_	_	_	16	
	- 1				-	
Refinery	-	-1	-1	-	16	
Refinery Bulk Terminal	_ 28	-	_ _	- -	-	

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2017 (Thousand Barrels) — Continued

			PAD Districts			U.C. Total	
Commodity	1	2	3	4	5	U.S. Total	
B. ( 1401 )							
Reformulated (Other)	_	_	_	_	_		
Bulk Terminal	_	_	_	_	_	_	
Pipeline	-	-	-	_	-	-	
Conventional	4,177	6,309	8,627	1,751	2,246	23,110	
Refinery	33	1,463	4,339	669	817	7,321	
Bulk Terminal	1,328	2,717	2,435	758	1,294	8,532	
Pipeline	2,816 <b>34</b>	2,129 <b>138</b>	1,853	324 <b>59</b>	135	7,257 <b>231</b>	
Conventional (Blended with Fuel Ethanol) Refinery	34	130	_	53	_	53	
Bulk Terminal	34	138	_	6	_	178	
Pipeline	-	-	-	-	-	-	
Ed55 and Lower	34	138	-	59	-	231	
Refinery	-	-	-	53	-	53	
Bulk Terminal	34	138	-	6	-	178	
Pipeline	-	-	-	-	-	-	
Greater than Ed55	_	_	-	_	-	_	
Refinery Bulk Terminal	-	-	_	_	_	_	
Pipeline	_	_	_	_	_		
Conventional (Other)	4,143	6,171	8,627	1,692	2,246	22,879	
Refinery	33	1,463	4,339	616	817	7,268	
Bulk Terminal	1,294	2,579	2,435	752	1,294	8,354	
Pipeline	2,816	2,129	1,853	324	135	7,257	
Finished Aviation Gasoline	129	137	376	8	273	923	
Refinery	-	47	307	8	188	550	
Bulk Terminal	129	90	69	_	85	373	
Pipeline	- 0.247	7 404	- 15 404	- 773	- 0.440	40.400	
Kerosene-Type Jet Fuel	<b>9,347</b> 479	<b>7,404</b> 2,002	<b>15,461</b> 6,432	276	<b>9,443</b> 3,666	<b>42,428</b> 12,855	
Bulk Terminal	4,716	3,677	4,004	343	4,879	17,619	
Pipeline	4,152	1,725	5,025	154	898	11,954	
Kerosene	1,646	160	112	1	35	1,954	
Refinery	141	135	110	1	1	388	
Bulk Terminal	1,476	25	2	_	34	1,537	
Pipeline	29	-	-	-	-	29	
Distillate Fuel Oil <sup>2</sup>	48,348	25,763	41,031	3,188	11,555	129,885	
Refinery	2,318	5,998	15,926	1,420	4,972	30,634	
Bulk Terminal	37,130	12,739	13,517	1,148 620	5,185	69,719	
Pipeline	8,900 <b>38,802</b>	7,026 <b>24,963</b>	11,588 <b>35,521</b>	2,940	1,398 <b>10,561</b>	29,532 <b>112,787</b>	
Refinery	1,666	5,536	13,284	1,198	4,200	25,884	
Bulk Terminal	29,668	12,649	11,501	1,124	5,079	60,021	
Pipeline	7,468	6,778	10,736	618	1,282	26,882	
Greater than 15 ppm to 500 ppm sulfur	4,552	419	1,654	164	279	7,068	
Refinery	119	88	1,078	138	259	1,682	
Bulk Terminal	4,404	83	395	24	-	4,906	
Pipeline	29	248	181	2	20	480	
Greater than 500 ppm sulfur	4,994	381	3,856	84	715	10,030	
Refinery	533 3,058	374 7	1,564	84	513 106	3,068	
Bulk Terminal Pipeline	1,403	-	1,621 671	_	96	4,792 2,170	
Residual Fuel Oil <sup>5</sup>	7,203	1,146	19,762	202	4,163	32,476	
Refinery	351	1,008	4,070	202	2,567	8,198	
Bulk Terminal	6,852	138	15,692	_	1,590	24,272	
Pipeline	-	-	_	-	6	6	
Less than 0.31% Sulfur	1,337	11	1,404	8	98	2,858	
Refinery	60	-	198	8	_	266	
Bulk Terminal	1,277	11	1,206	_	98	2,592	
0.31% to 1.00% Sulfur	1,303	178	4,389	<b>9</b>	483	6,362	
Refinery  Bulk Terminal	40 1,263	113	321 4,068	9	330 153	813 5,549	
Greater than 1.00% Percent Sulfur	4,563	957	13,969	185	3,576	23,250	
Refinery	251	895	3,551	185	2,237	7,119	
Bulk Terminal	4,312	62	10,418	-	1,339	16,131	
Petrochemical Feedstocks	105	581	2,322	_	2	3,010	
Refinery	105	581	2,322	-	2	3,010	
Naphtha for Petrochemical Feedstock Use	105	438	1,481	_	2	2,026	
Other Oils for Petrochemical Feedstock Use	-	143	841	-	-	984	
Special Naphthas	35	130	758	_	59	982	
Refinery	17	71	750	_	59	897	
Bulk Terminal	18	59 625	8	_	-	85	
Lubricants Refinery	<b>916</b> 496	<b>625</b> 248	<b>7,141</b> 4,678	_	<b>801</b> 532	<b>9,483</b> 5,954	
Bulk Terminal	420	377	2,463	_	269	3,529	
Waxes	476	48	203	_		727	
Refinery	476	48	203	_	_	727	
Petroleum Coke	-	1,258	5,092	96	1,350	7,796	
Refinery	_	1,258	5,092	96	1,350	7,796	
Asphalt and Road Oil	3,966	8,570	4,294	1,161	1,281	19,272	
Refinery	346	3,963	2,092	747	457	7,605	
Bulk Terminal	3,620	4,607	2,202	414	824	11,667	

Table 56. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, October 2017 (Thousand Barrels)

		Motor Gasoline		Motor Gas	oline Blending Comp	ponents <sup>1</sup>		
Commodity	Reformulated	Conventional	Total	Reformulated	Conventional	Total	Kerosene	
RAD District 1	28	1,361	1,389	13,252	26,474	39,726	1,61	
PAD District 1 Connecticut	20	1,301	1,309	894	15	909	15	
	_	_	_					
Delaware	-	-	-	625	417	1,042	133	
District of Columbia	-			-			•	
Florida	-	523	523	-	5,865	5,865		
Georgia	-	218	218	_	2,416	2,416		
Maine	-	-	-	333	258	591	19	
Maryland	-	-	-	1,001	66	1,067	8	
Massachusetts	6	-	6	1,333	-	1,333	2	
New Hampshire	_	-	-	-	-	-	2	
New Jersey	_	32	32	5,029	6,354	11,383	49	
New York	22	-	22	748	1,475	2,223	444	
North Carolina	_	197	197	_	2,688	2,688	337	
Pennsylvania	_	11	11	994	3,942	4,936	109	
Rhode Island	_			693		693		
South Carolina	_	172	172	_	1,561	1,561	2:	
Vermont		34	34		1,501	1,501	2	
	_	138	138	1,602	1 074	2.076	3	
Virginia	-	36	36	1,002	1,274 143	2,876 143	-	
PAD District 2	_	4,180	4,180	3,909	27,823	31,732	160	
Illinois	_	458	458	1,981	4,851	6,832	140	
Indiana	_	266	266	759	2,882	3,641	-	
lowa	_	153	153	_	1,270	1,270		
Kansas	_	279	279	_	2,619	2,619	10	
Kentucky	_	362	362	366	1,015	1,381	10	
Michigan		225	225	25	2,138	2,163	10	
Minnesota	_	385	385	102	2,059	2,161		
	_	247	247	223	592	815		
Missouri	-			223	453	453	-	
Nebraska	_	71	71	-				
North Dakota	-	50	50	-	847	847		
Ohio	-	939	939	63	3,554	3,617	•	
Oklahoma	-	378	378	-	2,137	2,137	-	
South Dakota	-	39	39	-	345	345		
Tennessee	-	187	187	-	2,054	2,054	-	
Wisconsin	-	141	141	390	1,007	1,397	-	
PAD District 3	-	6,774	6,774	6,893	49,101	55,994	111	
Alabama	_	227	227	_	1,111	1,111	(	
Arkansas	-	171	171		700	700	-	
Louisiana	-	1,512	1,512	551	12,450	13,001	60	
Mississippi	-	1,236	1,236	8	2,034	2,042	-	
New Mexico	-	117	117	-	727	727		
Texas	-	3,511	3,511	6,334	32,079	38,413	40	
PAD District 4	_	1,427	1,427	_	4,507	4,507	•	
Colorado	_	271	271	_	1,216	1,216		
Idaho	-	318	318	_	106	106		
Montana	_	362	362	_	1,142	1,142		
Utah	_	84	84	_	1,294	1,294		
Wyoming	_	392	392	_	749	749		
PAD District 5	16	2,111	2,127	10,985	12,671	23,656	3!	
Alaska	_	836	836	_	-	-	34	
Arizona	-	77	77	698	376	1,074	-	
California	16	400	416	9,970	6,517	16,487		
Hawaii	-	1	1	-	1,007	1,007	-	
Nevada	_	205	205	14	367	381		
Oregon	-	73	73	_	1,075	1,075		
Washington	_	519	519	303	3,329	3,632		
U.S. Total	44	15,853	15,897	35,039	120,576	155,615	1,92	

Table 56. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, October 2017 (Thousand Barrels) - Continued

		Distillate I	Fuel Oil <sup>1</sup>				
Commodity	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	Greater than 500 ppm	Total	Residual Fuel Oil	Propane	
PAD District 1	31,334	4,523	3,591	39,448	7,203	5,958	
Connecticut		1,808	156	3,582	17	-,	
Delaware		23	49	483	127	28	
District of Columbia		-	-	-	-	-	
Florida	2,015	89	-	2,104	1,209	19	
Georgia		-	-	1,060	359	12	
Maine		3	612	1,748	59	_	
Maryland		325	-	3,292	533	4	
Massachusetts		605	124	1,433	151	_	
New Hampshire		-	322	699	22	473	
New Jersey		506	625	10,974	3,057	98	
New York		144	532	5,504	686	1,767	
North Carolina		- 100	14	742	-	455	
Pennsylvania		123 637	815	4,254	380	2,203	
Rhode Island		637	_	1,177 545	212	822	
South Carolina		-	_ 4	15	212	822	
Vermont		242	338	1,712	391	5	
Virginia West Virginia		18	-	124	-	72	
PAD District 2		171	381	18,737	1,146	22,260	
Illinois		-	-	2,991	353	972	
Indiana		-	136	2,206	100	316	
lowa		1	-	1,415	2 31	399	
Kansas Kentucky		-	3	1,690 621	211	12,700 346	
Michigan		69	3	1,387	65	5,962	
Minnesota	,	09	52	1,495	106	357	
Missouri		13	2	425	100	201	
Nebraska		-	_	795	_	238	
North Dakota		1	_	732	28	50	
Ohio		-	36	1,789	119	641	
Oklahoma		28	65	1,119	31	33	
South Dakota		_	_	394	_	10	
Tennessee	681	-	-	681	62	3	
Wisconsin	851	59	87	997	38	32	
PAD District 3		<b>1,473</b>	<b>3,185</b> 25	<b>29,443</b> 758	<b>19,762</b> 449	<b>30,162</b> 29	
Arkansas		5	29	660	-	50	
Louisiana		842	1,156	6,710	8,155	1,758	
Mississippi	,	407	184	1,527	32	4,105	
New Mexico		_	-	346	38	4	
Texas		215	1,791	19,442	11,088	24,216	
PAD District 4	7-	162	84	2,568	202	786	
Colorado		-	-	553	9	21	
Idaho		71	-	257	- 85	32	
Montana Utah		23	84	774 561	27	680	
Wyoming		68	-	423	81	53	
PAD District 5		259	619	10,157	4,157	2,144	
Alaska	/	-	86	1,137	267	5	
Arizona		-	-	448	-	1,394	
California		259	311	5,179	2,573	546	
Hawaii		_	216	500	701	67	
Nevada Oregon		-	6	318 768	7	_	
Washington		_	_	1,807	609	132	
U.S. Total		6,588	7,860	100,353	32,470		
บ.อ. เปเสเ	85,905	0,588	7,860	100,353	32,470	61,310	

<sup>=</sup> No Data Reported.

<sup>1</sup> Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

Note: Stocks are reported as of the last day of the month.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report."

Table 57. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge, and Rail <sup>1</sup> Between PAD Districts, October 2017 (Thousand Barrels)

O		From 1 to			From	1 2 to		From	3 to
Commodity	2	3	5	1	3	4	5	1	2
Crude Oil	221	74	0	2,182	52,416	6,817	4,709	1,613	29,302
Petroleum Products	14,749	304	0	15,993	31,545	6,987	5,259	99,897	18,940
Natural Gas Liquids	4.667	304	0	3,307	21,218	3,830	682	1,585	6,743
Ethane	4.345	0	_	45	11,856	619	_	0	663
Propane	93	292	0	2,339	6,704	1,813	229	1,456	1,012
Normal Butane	89	8	0	685	1,102	752	303	123	469
Isobutane	129	4	0	238	596	272	150	6	583
Natural Gasoline	11	0	_	0	960	374	100	0	4,016
Refinery Olefins	0	0		232	399	5/4		0	4,010
Ethylene	J	U	_	202	099	_	_	U	U
	0	0	_	232	399	_	_	-	0
Propylene	U	U	_	232	399	_	_	U	U
Butylene	_	-	_	_	_	_	-	_	<del>-</del>
Isobutylene	_	-	_	_	_	_	_	_	
Unfinished Oils	38	0	_	0	648	_	_	0	311
Motor Gasoline Blending Components	7,043	0	0	1,318	1,286	1,007	0	54,211	4,247
Reformulated - RBOB	0	0	0	0	127	_	0	7,825	1,447
Conventional	7,043	0	0	1,318	1,159	1,007	0	46,386	2,800
CBOB	7,043	0	0	1,318	977	1,007	0	46,146	2,295
GTAB	-	-	_	_	-	_	-	_	_
Other	0	0	_	0	182	_	_	240	505
Renewable Fuels	0	0	0	7.988	4.599	474	4.516	511	0
Fuel Ethanol	0	0	0	7,820	4.164	474	4,267	511	0
Renewable Diesel Fuel	Ö	0	0	168	435	.,,	249	0.1	0
Other Renewable Fuels	U	U	U	100	+00		243	U	U
Finished Motor Gasoline	88	0	0	692	374	166	0	6,018	989
	88	U	U	692	3/4	100	U	0,018	969
Reformulated	-	_	_	_	_	_	_	_	_
Reformulated Blended with Fuel Ethanol	-	-	_	-	-	-	-	-	_
Reformulated Other	_	_	_	_		_	_		
Conventional	88	0	0	692	374	166	0	6,018	989
Conventional Blended with Fuel Ethanol	-	-	-	_	-	-	-	-	-
Ed55 and Lower	_	_	-	_	_	_	_	-	_
Greater than Ed55	-	-	-	-	_	-	-	-	-
Conventional Other	88	0	0	692	374	166	0	6,018	989
Finished Aviation Gasoline	0	0	_	0	0	-	_	905	106
Kerosene-Type Jet Fuel	229	0	0	82	59	750	0	13,156	1,581
Kerosene	-	-	-	-	_	_	_	-	_
Distillate Fuel Oil	2,675	0	0	886	992	688	0	22,774	4,405
15 ppm sulfur and under	2,675	0	0	886	992	688	0	20,838	4,256
Greater than 15 ppm to 500 ppm sulfur	0	0	_	0	0	_	_	331	105
Greater than 500 ppm sulfur	0	0	_	0	0	_	_	1.605	44
Residual Fuel Oil	Ö	0	_	_	934	_	_	- 1,000	0
Petrochemical Feedstocks	9	0		0	135			0	0
Naphtha for Petrochemical Feedstock Use	9	0	_	U	135	_	_	U	0
Other Oils for Petrochemical Feedstock Use	9	U	_	0	135	_	_	_	0
	0	- 0	_	U		_	_	U	-
Special Naphthas		•	_	_		_	_	-	18
Lubricants	0	0	0	17	0	_	0	463	268
Waxes	-	-	_	_	_	_	_	-	
Marketable Petroleum Coke	0	0	0	785	848	0	0	24	52
Asphalt and Road Oil	0	0	0	687	53	73	61	251	210
Miscellaneous Products	0	0	_	_	0	_	_	_	10
Total	14,970	378	0	18,175	83,961	13,804	9,968	101,510	48,242
	, ,			, ]	, , , ,		, , , , , , , , , , , , , , , , , , , ,	, , ,	

Table 57. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge, and Rail 1 Between PAD Districts, October 2017 (Thousand Barrels) - Continued

	From	3 to		From	1 4 to		From 5 to		
Commodity	4	5	1	2	3	5	1	3	4
Crude Oil	o	0	0	20,132	357	55	О	О	0
Petroleum Products	0	4,498	0	8,645	7,743	2,490	21	185	21
Natural Gas Liquids	0	95	0	7,516	7,482	190	0	0	0
Ethane	0	-	0	1,726	2,515	-	0	0	0
Propane	0	0	0	3,119	2,502	115	0	0	0
Normal Butane	0	60	0	1,267	902	56	0	0	0
Isobutane	0	35	0	554	524	19	0	0	0
Natural Gasoline	0	-	0	850	1,039	-	0	0	0
Refinery Olefins	-	_	0	0	0	-	0	0	_
Ethylene	-	-	-	-	-	-	_	_	-
Propylene	-	_	0	0	0	-	0	0	-
Butylene	-	-	_	-	_	-	_	_	-
Isobutylene	-	_	_	_	_	_	_	_	_
Unfinished Oils	_	-	0	0	0	_	0	0	_
Motor Gasoline Blending Components	0	3,156	0	181	0	1,106	0	0	0
Reformulated - RBOB	-	1,932	0	0	0	0	0	0	-
Conventional	0	1,224	0	181	0	1,106	0	0	0
CBOB	0	1,224	0	181	0	1,106	0	0	0
GTAB	-	_	_	_	_	_	_	_	_
Other	-	-	0	0	0	-	0	0	_
Renewable Fuels	0	452	0	0	0	82	0	0	0
Fuel Ethanol	0	332	0	0	0	82	0	0	0
Renewable Diesel Fuel	-	119	0	0	0	0	0	0	_
Other Renewable Fuels	-	-	-	-	-	-	-	_	_
Finished Motor Gasoline	0	0	0	324	0	400	0	0	0
Reformulated	-	-	_	-	-	-	-	_	_
Reformulated Blended with Fuel Ethanol	-	_	_	-	-	_	_	_	_
Reformulated Other	-	-	_	-	-	-	_	_	_
Conventional	0	0	0	324	0	400	0	0	0
Conventional Blended with Fuel Ethanol	-	-	_	_	_	-	_	_	-
Ed55 and Lower	-	_	_	_	_	_	_	-	-
Greater than Ed55	-	-	_	_	_	-	_	_	_
Conventional Other	0	0	0	324	0	400	0	0	0
Finished Aviation Gasoline	-	-	0	0	0	-	0	0	-
Kerosene-Type Jet Fuel	0	202	0	36	0	20	0	0	0
Kerosene	-	-	-	_	_	-	_	_	-
Distillate Fuel Oil	0	447	0	272	0	230	0	0	0
15 ppm sulfur and under	0	447	0	272	0	230	0	0	0
Greater than 15 ppm to 500 ppm sulfur	-	_	0	0	0	_	0	0	_
Greater than 500 ppm sulfur	-	-	0	0	0	-	0	0	_
Residual Fuel Oil	-	_	_	0	0	_	_	0	_
Petrochemical Feedstocks	-	_	0	0	0	_	0	0	_
Naphtha for Petrochemical Feedstock Use	-	_	_	0	0	_	_	0	_
Other Oils for Petrochemical Feedstock Use	-	_	0	0	-	_	0	_	_
Special Naphthas	-	-	_	0	0	_	_	0	_
Lubricants	_	0	0	0	0	0	21	111	_
Waxes		_	_	_	_	_	_	_	_
Marketable Petroleum Coke	0	26	0	84	69	157	0	74	0
Asphalt and Road Oil	0	120	0	233	192	305	0	0	21
Miscellaneous Products	_	_	_	0	0	_	_	0	_
Total	0	4,498	0	28,777	8,100	2,545	21	185	21

<sup>=</sup> No Data Reported.

<sup>1</sup> Movements of crude oil, fuel ethanol and biodiesel include movements by rail. Movements of other products are by pipeline, tanker and barge only.

Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail net movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 58. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, October 2017 (Thousand Barrels)

Crude Oil <sup>1</sup> Petroleum Products <sup>2</sup> Natural Gas Liquids  Ethane  Propane  Normal Butane  Isobutane  Natural Gasoline  Motor Gasoline Blending Components  Reformulated - RBOB  Conventional  CBOB	2 66 14,431 4,418 4,345 44 5 13 11 7,043	74 0 0 0 0 0	1 186 3,409 1,214 45 1,169	3 52,052 22,311 20,097 11,856	6,817 6,441 3,830	1 147 79,816 1,297	2 29,257 16,915	0 0	5 - 3.805
Petroleum Products <sup>2</sup> Natural Gas Liquids  Ethane Propane Normal Butane Isobutane Natural Gasoline Motor Gasoline Blending Components Reformulated - RBOB Conventional	14,431 4,418 4,345 44 5 13 11 7,043	0 0 0 0	<b>3,409</b> 1,214 45	<b>22,311</b> 20,097	6,441	79,816	16,915	0	3 805
Natural Gas Liquids  Ethane  Propane  Normal Butane  Isobutane  Natural Gasoline  Motor Gasoline Blending Components  Reformulated - RBOB  Conventional	4,418 4,345 44 5 13 11 7,043	0 0 0	1,214 45	20,097	- /	- ,	-,	О	3 804
Ethane Propane Normal Butane Isobutane Natural Gasoline Motor Gasoline Blending Components Reformulated - RBOB Conventional	4,345 44 5 13 11 7,043	0	45		3,830	1 297	0,407		0,000
Ethane Propane Normal Butane Isobutane Natural Gasoline Motor Gasoline Blending Components Reformulated - RBOB Conventional	44 5 13 11 7,043	0	-	11.856			6.467	0	-
Normal Butane	5 13 11 7,043	0	1,169		619	0	663	0	-
Normal Butane	13 11 7,043	•		5.646	1.813	1,297	883	0	_
Isobutane	11 7,043	0	0	1.060	752	0	369	0	
Natural Gasoline	7,043		0	575	272	0	536	0	-
Motor Gasoline Blending Components		0	0	960	374	0	4.016	0	-
Reformulated - RBOB		0	929	1,104	1,007	44,333	3,985	Ö	3,156
Conventional	Ul	0	0	127	_	7,825	1,447	_	1.932
	7.043	0	929	977	1.007	36,508	2,538	0	1.22
0202	7.043	0	929	977	1.007	36,508	2,295	0	1,22
GTAB	7,010	_	-	-	-	-		_	
Other	0	0	_	0	_	_	243	_	
Renewable Fuels	_	_	_	_	_	_		_	
Fuel Ethanol	_	_	_	_	_	_	_	_	
Renewable Diesel Fuel	_	_	_	_	_	_	_	_	
Other Renewable Fuels	_	_	_	_	_	_	_	_	
Finished Motor Gasoline	88	0	672	105	166	2,733	739	0	(
Reformulated	_	_	-	-	-	_,	-	_	
Reformulated Blended with Fuel Ethanol	_	_	_	_	_	_	_	_	
Reformulated Other	_	_	_	_	-	_	_	_	-
Conventional	88	0	672	105	166	2,733	739	0	(
Conventional Blended with Fuel Ethanol	-	_	-	-	-	_,	-	_	_
Ed55 and Lower	_	_	_	_	_	_	_	_	
Greater than Ed55	_	_	_	_	-	_	_	_	
Conventional Other	88	0	672	105	166	2.733	739	0	(
Finished Aviation Gasoline	_	_	-	-	-	2,700	-	_	
Kerosene-Type Jet Fuel	229	0	82	59	750	11,901	1,581	0	20
Kerosene		_	_	-	-	- 1,001		_	
Distillate Fuel Oil	2.653	0	512	946	688	19.552	4.143	0	44
15 ppm sulfur and under	2,653	ő	512	946	688	17,616	4,038	ő	44
Greater than 15 ppm to 500 ppm sulfur	0	0	0.2	0 10	_	331	105	_	
Greater than 500 ppm sulfur	_	0	0	0	_	1.605		_	
Residual Fuel Oil	_	_	_	_	_	- 1,000	_	_	
Miscellaneous Products	_	_			_	_		_	
Total	14,497	74	3,595	74,363	13,258	79,963	46,172	0	3,80

Table 58. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, October 2017 (Thousand Barrels) - Continued

		From	4 to		From	From 5 to		
Commodity	1	2	3	5	3	4		
Crude Oil <sup>1</sup>	0	20,132	357	-	0	0		
Petroleum Products <sup>2</sup>	0	8,329	7,482	1,756	0	0		
Natural Gas Liquids	0	7.516	7,482	_	0	C		
Ethane	0	1,726	2,515	-	0	(		
Propane	0	3,119	2,502	-	0	(		
Normal Butane	0	1,267	902	-	0	(		
Isobutane	0	554	524	-	0			
Natural Gasoline	0	850	1,039	_	0	(		
Motor Gasoline Blending Components	0	181	0	1.106	Ö			
Reformulated - RBOB	0	0	0	0	0	-		
Conventional	0	181	0	1.106	0	(		
CBOB	0	181	0	1,106	0			
GTAB	_	-	_	-,	_			
Other	_	0	0	_	0			
Renewable Fuels	_	_	_	_	_			
Fuel Ethanol	_	_	_	_	_	_		
Renewable Diesel Fuel	_	_	_	_	_	_		
Other Renewable Fuels	_	_	_	_	_			
Finished Motor Gasoline	0	324	0	400	0	(		
Reformulated	_	-	_	-	_			
Reformulated Blended with Fuel Ethanol	_	_	_	_	_			
Reformulated Other	_	_	_	_	_	_		
Conventional	0	324	0	400	0			
Conventional Blended with Fuel Ethanol	_	024	_	-	_			
Ed55 and Lower	_	_	_	_	_	_		
Greater than Ed55	_	_	_	_				
Conventional Other	0	324	0	400	0			
Finished Aviation Gasoline	U	324	U	400	U	,		
Kerosene-Type Jet Fuel	0	36	0	20	0			
Kerosene	U	30	U	20	U			
Distillate Fuel Oil	_	272	_	230		-		
15 ppm sulfur and under	0	272	0	230	0			
	0	2/2	0	230	0			
Greater than 15 ppm to 500 ppm sulfur	0	U	0	_	0			
Residual Fuel Oil	U	_	Ü	_	U	-		
	_	-	_	-	_			
Miscellaneous Products	-	_	_	_	_	-		
Total	0	28,461	7,839	1,756	0	(		

 <sup>=</sup> No Data Reported.
 Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report."
 Movements of crude oil, fuel ethanol and biodiesel include movements by rail. Movements of other products are by pipeline, tanker and barge only.
 Renewable diesel fuel includes biodiesel and other renewable diesel.

Table 59. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 2017 (Thousand Barrels)

		From 1 to		From 2 to				
Commodity	2	3	5	1	3	5		
Crude Oil <sup>1</sup>	155	0	_	280	364	_		
Petroleum Products <sup>2</sup>	69	0	0	931	3.085	0		
Natural Gas Liquids	-	0	_	0	0,555	_		
Ethane	_	_	_	_	_	_		
Propane	_	0	_	0	0	_		
Normal Butane	_	_	_	_	_	_		
Isobutane	_	_	_	_	_	_		
Natural Gasoline	_	_	_	_	_	_		
Unfinished Oils	38	0	_	0	648	_		
Motor Gasoline Blending Components	0	0	_	389	182			
Reformulated - RBOB	-				102			
Conventional	0	0	_	389	182			
CBOB	0	0	_	389	0			
GTAB	U	U	_	309	U	_		
Other	_	- 0	_	0	182	_		
Renewable Fuels	0	0	_	0	838			
Fuel Ethanol	0	0	U	0	838			
Renewable Diesel Fuel	U	0	0	0	0.00			
	-	U	U	_	U	0		
Other Renewable Fuels	_		-	20	-	-		
Finished Motor Gasoline	0	U	-	20	269	-		
Reformulated	_	_	_	_	_	_		
Reformulated Blended with Fuel Ethanol	-		-	-	-	-		
Reformulated Other	_	_	-	_	-	-		
Conventional	0	0	-	20	269	-		
Conventional Blended with Fuel Ethanol	-	-	_	-	-	-		
Ed55 and Lower	-	_	-	-	-	-		
Greater than Ed55	-	-	-	-	_	-		
Conventional Other	0	0	-	20	269			
Finished Aviation Gasoline	0	0	-	0	0			
Kerosene-Type Jet Fuel	-	0	-	0	0	-		
Kerosene	-	-	-	_	_	-		
Distillate Fuel Oil	22	0	-	374	46			
15 ppm sulfur and under	22	0	-	374	46	-		
Greater than 15 ppm to 500 ppm sulfur	-	-	-	-	-	-		
Greater than 500 ppm sulfur	0	0	-	-	0			
Residual Fuel Oil	0	0	-	-	934			
Less than 0.31 percent sulfur	0	0	-	-	110	-		
0.31 to 1.00 percent sulfur	-	-	-	-	-	-		
Greater than 1.00 percent sulfur	0	0	-	-	824			
Petrochemical Feedstocks	9	0	_	0	135			
Naphtha for Petrochemical Feedstock Use	0	0	-	-	135	-		
Other Oils for Petrochemical Feedstock Use	9	-	_	0	_	-		
Special Naphthas	0	0	-	-	0	-		
Lubricants	0	0	0	17	0	0		
Waxes	-	-	-	-	-	-		
Marketable Petroleum Coke	-	-	_	-	_	-		
Asphalt and Road Oil	0	0	-	131	33	-		
Miscellaneous Products	0	0	_	_	0	_		
Total	224	•	,	1,211	3.449			

Table 59. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 2017 (Thousand Barrels) - Continued

			From	3 to				From 5 to	
Commodity	1	New England	Central Atlantic	Lower Atlantic	2	5	1	2	3
Crude Oil <sup>1</sup>	1,466	_	1,466	_	45	_	0	0	C
Petroleum Products <sup>2</sup>	19.716	8	555	19,153	1,647	73	21	0	111
Natural Gas Liquids	26	_	-	26		-	0	_	
Ethane		_	_		_	_	_	_	_
Propane	26	_	_	26	_	_	0	_	(
Normal Butane		_	_		_	_	_	_	_
Isobutane	_	_	_	_	_	_	_	_	_
Natural Gasoline	_	_	_	_	_	_	_	_	_
Unfinished Oils	0	_	_	_	311	_	0	0	(
Motor Gasoline Blending Components	9.878	_	373	9.505	262	_	ő	0	Ċ
Reformulated - RBOB	-	_	-	-		_	_	_	•
Conventional	9,878	_	373	9,505	262	_	0	0	(
CBOB	9,638	_	133	9,505	0	_	0	0	
GTAB	9,000	_	100	9,505	_	_	_	_	`
Other	240	_	240	_	262	_	0	0	(
Renewable Fuels	511		240	511	0	73	0	0	
Fuel Ethanol	511	_		511	0	73	0	0	
Renewable Diesel Fuel	311	_	_	311	U	73	٥	U	
Other Renewable Fuels	_	_	_	_	_	73	_	_	,
Finished Motor Gasoline	3.285	-	_	3.285	250	_	- 0	0	-
Reformulated	3,285	_	_	3,285	250	_	U	U	,
	-	-	-	-	-	-	-	-	
Reformulated Blended with Fuel Ethanol	-	-	-	_	-	-	-	-	
Reformulated Other		-	-		-	-	_	-	
Conventional	3,285	-	-	3,285	250	-	0	0	(
Conventional Blended with Fuel Ethanol	-	-	-	-	-	-	-	-	
Ed55 and Lower	-	-	-	-	-	-	-	-	
Greater than Ed55	-	-	-	-	-	_	_	-	
Conventional Other	3,285	-	-	3,285	250	-	0	0	(
Finished Aviation Gasoline	905	8	24	873	106	-	0	0	(
Kerosene-Type Jet Fuel	1,255	-	-	1,255	-	-	0	-	
Kerosene	-	-	-	_	_	-	_	-	
Distillate Fuel Oil	3,222	-	-	3,222	262	-	0	0	
15 ppm sulfur and under	3,222	-	-	3,222	218	_	0	0	
Greater than 15 ppm to 500 ppm sulfur	-	-	-	-	-	_	-	-	
Greater than 500 ppm sulfur	-	-	-	-	44	_	-	0	
Residual Fuel Oil	-	-	-	-	0	-	-	0	
Less than 0.31 percent sulfur	-	-	-	-	0	-	-	0	
0.31 to 1.00 percent sulfur	-	-	-	-	-	_	-	-	
Greater than 1.00 percent sulfur	-	-	-	-	0	-	-	0	
Petrochemical Feedstocks	0	-	-	_	0	_	0	0	(
Naphtha for Petrochemical Feedstock Use	-	-	-	-	0	_	-	0	(
Other Oils for Petrochemical Feedstock Use	0	-	-	-	0	-	0	0	
Special Naphthas	_	_	_	_	18	_	_	0	
Lubricants	463	-	158	305	268	0	21	0	11
Waxes	_	_	_	_	_	_	_	_	-
Marketable Petroleum Coke	-	-	-	-	-	_	_	-	
Asphalt and Road Oil	171	_	_	171	160	_	0	0	
Miscellaneous Products	-	-	-	-	10	-	-	0	
Total	04 400	_	0.004	10 150	4 000	70		ا	
Total	21,182	8	2,021	19,153	1,692	73	21	0	11

<sup>- =</sup> No Data Reported.

Sources: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movements Report."

1 Movements of crude oil, fuel ethanol and biodiesel include movements by rail. Movements of other products are by pipeline, tanker and barge only.

2 Renewable diesel fuel includes biodiesel and other renewable diesel.

Table 60. Movements of Crude Oil and Selected Products by Rail Between PAD Districts, October 2017 (Thousand Barrels)

<b>2</b>		From	1 to		From 2 to				
Commodity	2	3	4	5	1	3	4	5	
Crude Oil	0	-	0	0	1,716	_	0	4,709	
Propane	49	292	0	0	1,170	1,058	0	229	
Propylene	0	0	_	_	232	399	_	_	
Normal Butane	84	8	0	0	685	42	0	303	
Isobutane	116	4	0	0	238	21	0	150	
Fuel Ethanol	0	0	0	0	7,820	3,326	474	4,267	
Biodiesel	0	0	-	0	168	435	_	249	
Marketable Petroleum Coke	0	0	0	0	785	848	0	0	
Asphalt and Road Oil	0	0	0	0	556	20	73	61	

0		From	1 3 to		From 4 to				
Commodity	1	2	4	5	1	2	3	5	
Crude Oil	0	0	0	0	0	0	_	55	
Propane	133	129	0	0	0	0	0	115	
Propylene	0	0	_	_	0	0	0	-	
Normal Butane	123	100	0	60	0	0	0	56	
Isobutane	6	47	0	35	0	0	0	19	
Fuel Ethanol	0	0	0	332	0	0	0	82	
Biodiesel	0	0	_	46	0	0	0	0	
Marketable Petroleum Coke	24	52	0	26	0	84	69	157	
Asphalt and Road Oil	80	50	0	120	0	233	192	305	

0		From	1 5 to	
Commodity	1	2	3	4
Crude Oil	0	0	-	0
Propane	0	0	0	0
Propylene	0	0	0	_
Normal Butane	0	0	0	0
Isobutane	0	0	0	0
Fuel Ethanol	0	0	0	0
Biodiesel	0	0	0	-
Marketable Petroleum Coke	0	25	74	0
Asphalt and Road Oil	0	0	0	21

= No Data Reported.
Source: Rail Movements are estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 61. Movements of Crude Oil by Pipeline, Tanker, Barge and Rail between PAD Districts, October 2017 (Thousand Barrels)

PADD	Pipeline	Tanker and Barge	Rail	Total	
From 1 to					
2	66	155	_	221	
3	74	0	_	74	
4	0	=	_	0	
5	-1	_	_	0	
From 2 to				_	
1	186	280	_	2,182	
3	52,052	364	_	52,416	
4	6,817	_	_	6,817	
5	´ -	_	_	4,709	
From 3 to					
1	147	1,466	-	1,613	
2	29,257	45	_	29,302	
4	0	-	-	C	
5	-	_	_	0	
From 4 to					
1	0	0	-	0	
2	20,132	0	_	20,132	
3	357	0	_	357	
5	-	_	_	55	
From 5 to					
1	0	0	_	0	
2	0	0	_	0	
3	0	0	-	0	
4	0	_	_	0	

= No Data Reported.
Sources: Energy Information Administration (EIA) Forms EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 62. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge and Rail Between PAD Districts, October 2017 (Thousand Barrels)

		PAD District 1			PAD District 2			PAD District 3	
Commodity	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	3,795	295	3,500	49,655	66,124	-16,469	52,847	30,915	21,932
Petroleum Products	115,912	15,053	100,859	42,359	59,784	-17,425	39,777	123,335	-83,558
Natural Gas Liquids	4,892	4,971	-79	18,926	29,037	-10,111	29,004	8,423	20,581
Ethane	45	4,345	-4,300	6,734	12,520	-5,786	14,371	663	13,708
Propane	3,795	385	3,410	4,224	11,085	-6,861	9,498	2,468	7,030
Normal Butane	808	97	711	1.825	2,842	-1,017	2.012	652	1.360
Isobutane	244	133	111	1,266	1,256	10	1,124	624	500
Natural Gasoline	0	11	-11	4,877	1,334	3,543	1,999	4,016	-2,017
Refinery Olefins	232	0	232	0	631	-631	399	0	399
Ethylene	0	0			-	-	0	0	_
Propylene	232	0	232	0	631	-631	399	ő	399
Butylene	0	0	_02	0	0	301	0	0	-
Isobutylene	0	0		0	0	_	0	0	_
Unfinished Oils	0	38	-38	349	648	-299	648	311	337
Motor Gasoline Blending Components	55,529	7,043	48,486	11,471	3,611	7,860	1,286	61,614	-60.328
Reformulated - RBOB	7.825	7,043	7.825	1,471	127	1.320	1,200	11.204	-11.077
	,	7.043	,	10.024		,		, -	-49.251
Conventional	47,704	,	40,661 40,421	9,519	3,484	6,540	1,159	50,410	-, -
CBOB	47,464	7,043	40,421	9,519	3,302	6,217	977	49,665	-48,688
GTAB	0	0	-	-	-	-	-		-
Other	240	0	240	505	182	323	182	745	-563
Renewable Fuels	8,499	0	8,499	0	17,577	-17,577	4,599	963	3,636
Fuel Ethanol	8,331	0	8,331	0	16,725	-16,725	4,164	843	3,321
Renewable Diesel Fuel	168	0	168	0	851	-851	435	119	315
Other Renewable Fuels	-	-	-	-	-	-	0	0	-
Finished Motor Gasoline	6,710	88	6,622	1,401	1,232	169	374	7,007	-6,633
Reformulated	0	0	-	0	0	-	0	0	-
Reformulated Blended with Fuel Ethanol Reformulated Other	0 –	0 -	_ _	0 -	0 -	_	0 -	0 -	_ _
Conventional	6,710	88	6,622	1,401	1,232	169	374	7,007	-6,633
Conventional Blended with Fuel Ethanol	0	0	_	0	0	_	0	0	_
Ed55 and Lower	0	0	-	0	0	_	0	0	-
Greater than Ed55	0	0	-	0	0	_	0	0	-
Conventional Other	6,710	88	6,622	1,401	1,232	169	374	7,007	-6,633
Finished Aviation Gasoline	905	0	905	106	0	106	0	1,011	-1,011
Kerosene-Type Jet Fuel	13,238	229	13,009	1,846	891	955	59	14,939	-14,880
Kerosene	0	0	· –	0	0	_	0	0	· –
Distillate Fuel Oil	23,660	2,675	20,985	7,352	2,566	4,786	992	27,626	-26,634
15 ppm sulfur and under	21,724	2.675	19.049	7.203	2.566	4.637	992	25.541	-24.549
Greater than 15 ppm to 500 ppm sulfur	331	0	331	105	0	105	0	436	-436
Greater than 500 ppm sulfur	1,605	0	1,605	44	0	44	0	1,649	-1,649
Residual Fuel Oil	0	0	-	0	934	-934	934	0	934
Petrochemical Feedstocks	0	9	-9	9	135	-126	135	0	135
Naphtha for Petrochemical Feedstock Use	0	Ö	-	0	135	-135	135	Ö	135
Other Oils for Petrochemical Feedstock Use	0	9	-9	9	0	9	0	0	_
Special Naphthas	0	0	_	18	ő	18	0	18	-18
Lubricants	501	ő	501	268	17	251	111	731	-620
Waxes	0	0	_	0	0		0	0	
Marketable Petroleum Coke	808	0	808	161	1,632	-1,472	991	102	888
Asphalt and Road Oil	937	0	937	443	873	-430	245	581	-335
Miscellaneous Products	0	0	307	10	0/3	10	0	10	-10
	U			- 10		10	0	10	- 10
Total	119,707	15,348	104,359	92,014	125,908	-33,894	92,624	154,250	-61,626

Table 62. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge and Rail Between PAD Districts, October 2017 (Thousand Barrels) — Continued

		PAD District 4		PAD District 5			
Commodity	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	
Crude Oil	6,817	20,544	-13,727	4,764	0	4,764	
Petroleum Products	7.008	18.878	-11.870	12.246	251	11.99	
Natural Gas Liquids	3,830	15,188	-11,358	967	201	96	
Ethane	619	4.241	-3.622	0	0	30.	
Propane	1,813	5,736	-3,923	344	0	34	
Normal Butane	752	2.225	-1.473	419	0	41:	
Isobutane	272	1.097	-1,473	204	0	20	
	374	1,889		0	0	20	
Natural Gasoline		,	-1,515		•		
Refinery Olefins	0	0	-	0	0		
Ethylene	_	-	-	_	-		
Propylene	0	0	-	0	0		
Butylene	0	0	-	0	0		
Isobutylene	0	0	-	0	0		
Unfinished Oils	0	0	-	0	0	-	
Motor Gasoline Blending Components	1,007	1,287	-280	4,262	0	4,262	
Reformulated - RBOB	-	-	-	1,932	0	1,93	
Conventional	1,007	1,287	-280	2,330	0	2,330	
CBOB	1,007	1,287	-280	2,330	0	2,33	
GTAB	_	_	_	_	_	,	
Other	0	0	_	0	0		
Renewable Fuels	474	82	392	5.050	0	5.05	
Fuel Ethanol	474	82	392	4,681	0	4,68	
Renewable Diesel Fuel	0	0	392	368	0	36	
	U	U	_	0	0	300	
Other Renewable Fuels	- 100	704	-	~	-	40	
Finished Motor Gasoline	166	724	-558	400	0	400	
Reformulated	-	-	-	0	0		
Reformulated Blended with Fuel Ethanol	-	-	-	0	0		
Reformulated Other	-	-	-	-	-		
Conventional	166	724	-558	400	0	400	
Conventional Blended with Fuel Ethanol	0	0	-	0	0		
Ed55 and Lower	0	0	-	0	0		
Greater than Ed55	0	0	-	0	0		
Conventional Other	166	724	-558	400	0	400	
Finished Aviation Gasoline	0	0	_	0	0		
Kerosene-Type Jet Fuel	750	56	694	222	0	22:	
Kerosene	0	0	_	0	0		
Distillate Fuel Oil	688	502	186	677	0	67	
15 ppm sulfur and under	688	502	186	677	0	67	
Greater than 15 ppm to 500 ppm sulfur	0	0	_	0	0	01	
Greater than 500 ppm sulfur	0	0	_	0	0		
Residual Fuel Oil	0	0	_	0	0		
	U	U	-	~	-		
Petrochemical Feedstocks	-	-	-	0	0		
Naphtha for Petrochemical Feedstock Use	-	-	-	0	0		
Other Oils for Petrochemical Feedstock Use	-	-	-	-	-		
Special Naphthas	-	-	-	0	0		
Lubricants	0	0	-	0	132	-13	
Waxes	_	-	_	0	0		
Marketable Petroleum Coke	0	310	-310	184	99	8	
Asphalt and Road Oil	93	729	-636	485	21	46	
Miscellaneous Products	0	0	_	0	0		
Fotal	13,825	39,422	-25,597	17,010	251	16,75	

<sup>- =</sup> No Data Reported.

Movements of crude oil, fuel ethanol and biodiesel include movements by rail. Movements of other products are by pipeline, tanker and barge only. Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail net movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

# Appendix A

# **District Descriptions and Maps**

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

## PAD District I

*East Coast:* The District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian No. 1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

#### Sub-PAD District I

*New England:* The States of Connecticut, Maine, Massachusetts, NewHampshire, Rhode Island, and Vermont.

*Central Atlantic:* The District of Columbia and the States of Delaware, Maryland, New Jersey, New York, and Pennsylvania.

*Lower Atlantic:* The States of Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

## PAD District II

*Indiana-Illinois-Kentucky:* The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

*Minnesota-Wisconsin-North and South Dakota:* The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

*Oklahoma-Kansas-Missouri:* The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

#### PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

**Texas Gulf Coast:** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

*North Louisiana-Arkansas:* The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

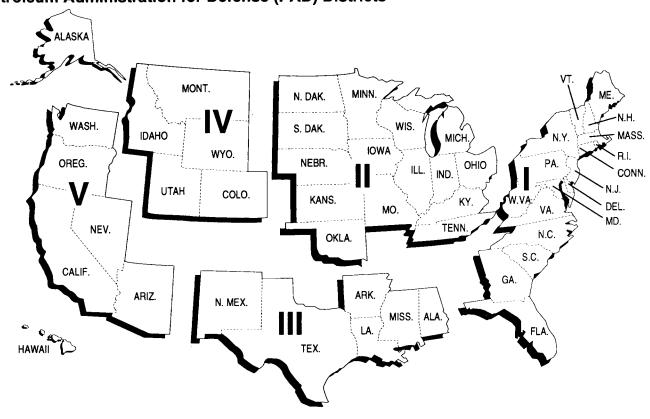
## PAD District IV

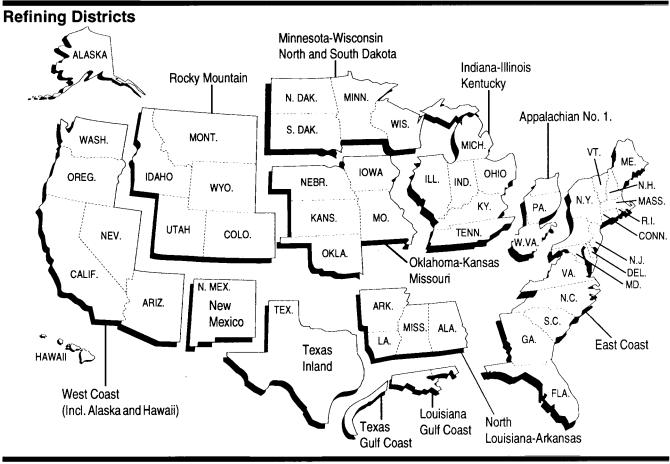
Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

# **PAD District V**

*West Coast:* The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

# Petroleum Administration for Defense (PAD) Districts





## Appendix B

# **PSM Explanatory Notes**

# **Preface**

The *Petroleum Supply Monthly (PSM)* is the monthly component of a series of three publications concerning the supply and disposition of crude oil and petroleum products produced by the Petroleum Division of the Energy Information Administration (EIA). The other two components are the *Weekly Petroleum Status Report (WPSR)* and the *Petroleum Supply Annual (PSA)*. Together these publications present a comprehensive snapshot of petroleum supply data on a weekly, monthly and yearly basis.

Data presented in the PSM describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply: petroleum refiners, motor gasoline blenders, operators of natural gas processing plants and fractionators, inter-PAD District transporters, importers, and major inventory holders of petroleum products and crude oil. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

The PSM tables present statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District level, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources.

Final statistics for the data series published in the *PSM* are published in the *PSA*. The *PSA* is published approximately five months after the end of the report year.

# **Appendix B. Explanatory Notes**

#### 1. Overview

# A. The Energy Information Administration's Quality Guidelines

The data contained in the *Petroleum Supply Monthly (PSM)* are subject to separate information quality guidelines issued by the Office of Management and Budget (OMB), the Department of Energy (DOE), and Energy Information Administration (EIA). With available resources, EIA continually works to improve its systems in order to provide high quality information needed by public and private policymakers and decision makers. EIA has performance standards to ensure the quality (i.e., objectivity, utility, and integrity) of information it disseminates to the public. Quality is ensured and maximized at levels appropriate to the nature and timeliness of the disseminated information.

#### **B.** Concepts of Product Supply and Demand

Petroleum supply estimates contained in the PSM are often interpreted as an approximation of petroleum demand measured as product supplied. Product supplied is often called "implied" demand because it is a measure of demand that is implied by disappearance of petroleum products from facilities and activities in the "primary" supply chain. Facilities and activities in the primary supply chain include refineries and blending terminals, gas processing plants and fractionators, oxygenate producers, biodiesel producers, imports, exports, bulk storage terminals, and pipelines. Total product supplied in the PSM at the U.S. level is equal to the sum of field production, plus refinery and blender net production, plus renewable fuels, and oxygenate plant net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports. Net receipts are added as a component of supply at the PAD District level. Crude oil product supplied is normally zero because crude oil is processed in refineries and rarely, if ever, used directly.

The secondary system is that portion of the overall distribution network that falls between producers and end-users. Product typically flows in bulk from the primary supply system into the secondary system before delivery in small quantities to consumers (the tertiary system). The secondary system includes storage at bulk plants; at retail motor fuel outlets, such as service stations, truck stops, and convenience stores; and at retail fuel oil dealers. Bulk plants are wholesale storage facilities that have less than 50,000 barrels of storage capacity and, by definition, receive product only by tank car or truck, not by barge, tanker, or pipeline. Tertiary inventories are held by end users and include fuel in vehicle tanks, heating oil in residential tanks, fuel oil held by utilities, jet fuel stored in facilities operated by end users, and certain proprietary storage of raw materials (e.g. propane) for the chemical industry.

Data users sometimes consider demand as sales to the ultimate consumer or as the actual consumption of the product. Since there may be time delays between the movement of product into the primary market and its ultimate purchase or consumption, these definitions of demand require data on changes in secondary and/or tertiary stocks or the assumption that these values either remain constant or are small

compared to primary supply. The most recent study of secondary stocks was done by the National Petroleum Council in 1989. This study revealed that secondary distillate stocks were equal to about 6.9 percent of distillate stocks and 6.7 percent of distillate storage capacity.

#### C. Components of Supply and Disposition

The detailed statistics tables in the PSM provide complete supply and disposition information for the current month and year to date. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District supply and disposition data at the front followed by tables that contain detailed information on supply and disposition. These include tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following discussion of supply, disposition, and ending stocks as shown in Tables 1–25 is provided. The categories and products are defined in the EIA Glossary.

#### (1.) Supply

a. Field Production - Total Field Production is the sum of crude oil production and natural gas plant liquids and liquefied refinery gases production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to "Domestic Crude Oil Production" in Section 2C (1) for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs).

- b. Renewable Fuels and Oxygenate Plant Net Production Renewable Fuels and Oxygenate Plant Net Production are reported on Forms EIA-819 and EIA-22M. Production includes oxygenates (fuel ethanol, ETBE, MTBE, and other oxygenates) plus negative production of pentanes plus, finished motor gasoline, and motor gasoline blending components added to fuel ethanol as denaturants as well as biodiesel. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reported as input during the same month.
- c. Refinery and Blender Net Production Refinery and Blender Net Production is reported on Form EIA-810 and EIA-815. Refinery and Blender Net Production equals refinery and blenders production minus refinery and blender net inputs. Negative production of finished petroleum products will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the

same month.

- d. Imports Imports include receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.
- e. Net Receipts Net Receipts data are included in tables containing PAD District-level data to account for inter-PAD District movements of crude oil and petroleum products. Net receipts for a PAD District are calculated by subtracting shipments out of the PAD District from receipts into the PAD District. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge, and Rail between PAD Districts are shown in Table 60.
- f. Adjustments This column includes adjustment quantities for crude oil, fuel ethanol, motor gasoline blending components, biodiesel (included in "Renewable Fuels Except Fuel Ethanol") and distillate fuel oil. Adjustment quantities are derived either to balance supply and disposition for selected products or to reclassify one product to another product. Product supplied is the balancing item for most products and is interpreted as an implied measure of petroleum demand. Adjustments are used in cases where it does not make sense to interpret the balancing item as demand. Reclassifications reported in the adjustments column may be implied by the supply and disposition balance or reported on surveys. Recall that supply at the U.S. level is equal to the sum of field production, renewable fuels and oxygenate plant net production, refinery and blender net production, imports, and adjustments. Disposition at the U.S. level is equal to the sum of stock change, refinery and blender net inputs, exports, and products supplied. At the PAD District level, supply components include net receipts equal to gross receipts from other PAD Districts minus gross shipments to other PAD Districts. In every case, supply must equal disposition. Applicable components of supply and disposition vary depending on the product or product group. Unless otherwise noted in Section 2C, adjustment calculations that balance supply and disposition equal disposition minus supply for the U.S. and for each PAD District.

# (2.) Disposition

- a. Stock Change Stock Change is calculated as the difference between the current month Ending Stocks column and the Ending Stocks column in the prior month's publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
- b. Refinery and Blender Net Inputs Refinery and Blender Net Inputs are inputs of crude oil and intermediate materials (unfinished oils, motor and aviation gasoline blending components, liquefied petroleum gases, pentanes plus, hydrogen, oxygenates, renewable fuels, and other hydrocarbons) that are processed at refineries or blended at terminals to produce finished petroleum products.

Crude oil input represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (e.g. vacuum distillation units).

Inputs of natural gas plant liquids are refinery input of natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas plant liquids are reported on a gross basis.

Inputs of unfinished oils, motor gasoline blending components, and aviation gasoline blending components are published on a net basis (i.e., refinery input minus refinery production). Negative inputs of unfinished oils and motor and aviation gasoline blending components will occur when the amount of a product produced during the month is greater than the amount of that same product that is input or reclassified to become another product during the same month.

- c. Exports Exports include shipments from the 50 States and the District of Columbia to Puerto Rico, the Virgin Islands, other U.S. possessions and territories and to foreign countries.
- d. Products Supplied Products supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, (plus net receipts on a PAD District basis), plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Product supplied value indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of inter-PAD movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Beginning with data for January 2010, product supplied for crude oil is assumed equal to zero. Prior to January 1983, crude oil burned on leases and by pipelines as fuel was reported as either distillate or residual fuel oil and was included in product supplied for these products. From January 1983 through December 2009, crude oil product supplied was equal to crude oil used directly as reported on Form EIA-813 "Monthly Crude Oil Report." Reporting of crude oil used directly was discontinued on Form EIA-813 after December 2009.

# (3.) Ending Stocks

Ending stocks are primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals.

Crude oil that is in-transit by water from Alaska and crude oil stored in the Strategic Petroleum Reserve is included. Primary Crude oil that is in-transit by water from Alaska and crude oil stored in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage. Primary stocks of petroleum products also exclude secondary stocks held by dealers and jobbers and tertiary stocks held by consumers. Product stocks held as reserves by federal and state agencies are excluded from primary stock quantities reported by EIA, but quantities held in selected government reserves are provided in Appendix D.

Primary stocks of crude oil included barrels held on producing sites (lease stocks) until June 2016. Primary stocks of crude oil excluded lease stocks beginning with release of PSM data for July 2016 on September 30, 2016. Historical crude oil stocks in Petroleum Navigator were revised beginning with data for January 2005 to exclude lease stocks. Petroleum Navigator data may be accessed from the following locations on the EIA web site.

http://www.eia.gov/dnav/pet/pet\_sum\_snd\_d\_nus\_mbbl\_m\_cur.htm

 $http://www.eia.gov/dnav/pet/pet\_sum\_crdsnd\_k\_m.htm \\ http://www.eia.gov/dnav/pet/pet\_stoc\_typ\_c\_nus\_EPC0\_mbbl\_m.htm$ 

#### 2. Components - Forms Discussions

The data presented in the PSM include data collected by the EIA on nine monthly petroleum supply surveys, export data obtained from the U. S. Bureau of the Census, and crude production data obtained from State conservation agencies and the Minerals Management Service of the U. S. Department of Interior.

# A. Petroleum Supply Reporting System

The nine monthly petroleum supply surveys are part of the Petroleum Supply Reporting System (PSRS). The PSRS tracks the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. The PSRS is organized into two data collection subsystems: the Weekly Petroleum Supply Reporting System (WPSRS) and the Monthly Petroleum Supply Reporting System (MPSRS). The WPSRS processes the data from the seven weekly surveys. The MPSRS includes nine monthly surveys and one annual survey. The survey forms that comprise the PSRS are:

- 1. EIA-800, "Weekly Refinery Report,"
- 2. EIA-802, "Weekly Product Pipeline Report,"
- 3. EIA-803, "Weekly Crude Oil Stocks Report,"
- 4. EIA-804, "Weekly Imports Report,"
- 5. EIA-805, "Weekly Terminal Blender Report,"
- 6. EIA-809, "Weekly Oxygenate Report,"
- 8. EIA-22M, "Monthly Biodiesel Production Survey,"
- 9. EIA-810, "Monthly Refinery Report,"
- 10. EIA-812, "Monthly Product Pipeline Report,"
- 11. EIA-813, "Monthly Crude Oil Report,"
- 12. EIA-814, "Monthly Imports Report,"
- 13. EIA-815, "Monthly Terminal Blender Report."
- 14. EIA-816, "Monthly Natural Gas Liquids Report"
- 15. EIA-817, "Monthly Tanker and Barge Movement Report"
- 16. EIA-819, "Monthly Oxygenate Report"

# 17. EIA-820, "Annual Refinery Report."

Both weekly and monthly surveys are administered at six key points along the petroleum production and supply chain including refineries, fractionators, natural gas processing plants, bulk product storage and blending terminals, crude oil and product pipelines, crude oil stock holders, importers, and renewable fuel (biodiesel and fuel ethanol) and oxygenate producing plants. Monthly surveys also include inter-PAD District movements by pipelines, tankers, and barges. Weekly surveys do not capture petroleum movements. Respondents reporting on weekly surveys are sampled from among the respondents reporting on monthly surveys.

Annual U.S. refinery capacity data are collected on the Form EIA-820, "Annual Refinery Report." The EIA-820 data are published in the annual "Refinery Capacity Report."

## **B. Monthly Supply Survey Description and Methodology**

## (1.) Description of Surveys Forms

Copies of the survey forms and instructions can be found at: http://www.eia.doe.gov/oil\_gas/petroleum/survey\_forms/pet\_ survey forms.html

The Form EIA-22M "Monthly Biodiesel Production Survey" collects data on biodiesel plant location, operating status, annual production capacity, monthly biodiesel and co-product production, stocks, input of feedstocks, alcohol, and catalysts, and biodiesel sales.

The Form EIA-810, "Monthly Refinery Report," collects data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products. Working and shell storage capacity for selected products is collected on a semi-annual basis.

The Form EIA-812, "Monthly Product Pipeline Report," collects data on end-of-month stocks and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included. Product pipeline tank storage capacity for selected products is collected on a semi-annual basis.

The Form EIA-813, "Monthly Crude Oil Report," collects data on end-of-month stock levels of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis. Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks. Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts

are not included. Crude oil storage capacity of tank farms is collected on a semi-annual basis.

The Form EIA-814, "Monthly Imports Report," collects data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of

Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia. The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, and gasoline blending components only.

The Form EIA-815, "Monthly Terminal Blender Report," collects data on the operations of all bulk terminals located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U. S. possessions. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and fuel use and losses during the month are collected from operators of terminals. Working and shell storage capacity is collected on a semi-annual basis.

The Form EIA-816, "Monthly Natural Gas Liquids Report," collects data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, "Monthly Tanker and Barge Movement Report," collects data on the movements of crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819, "Monthly Oxygenate Report" collects facility-level data on oxygenate inputs, production, gasoline blending at ethanol plants, and end-of-month stocks. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Fuel ethanol storage capacity is collected on a semi-annual basis.

#### (2.) Frame

EIA maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the survey.

The activities for frames maintenance are conducted on an ongoing basis. Monthly frames maintenance procedures focus on examining industry periodicals that report changes in status (births, deaths, sales, mergers, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. Augmenting these sources are articles in newspapers, notices from respondents, and information received from survey systems operated by other offices. Survey managers review these sources regularly to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Respondents to Form EIA-22M "Monthly Biodiesel Production Survey" include operators of plants that produce biodiesel meeting ASTM D 6751-07B specifications and used for commercial purposes.

Respondents to Form EIA-810, "Monthly Refinery Report" include operators of all operating and idle petroleum refineries located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions.

Respondents to Form EIA-812, "Monthly Product Pipeline Report" include all product pipeline companies that carry petroleum products (including interstate, intrastate, and intra-company pipelines) in the 50 States and the District of Columbia.

Respondents to Form EIA-813, "Monthly Crude Oil Report" include all companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intra-company pipelines), crude oil tank farm operators, and companies transporting Alaskan crude oil by water (to U.S. ports) in the 50 States and the District of Columbia.

Respondents to Form EIA-814, "Monthly Imports Report" include each importer of record (or Ultimate consignee in some situations regarding Canadian imports) that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), (3) into Foreign Trade Zones located in the 50 States and the District of Columbia and (4) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity.

Respondents to Form EIA-815, "Monthly Terminal Blender Report" include operators of all bulk terminals located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands,

Guam, and other U. S. possessions must report. A bulk terminal is primarily used for storage, marketing, and often blending of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included.

Respondents to Form EIA-816, "Monthly Natural Gas Liquids Report" include operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator).

Respondents to Form EIA-817, "Monthly Tanker and Barge Movement Report" include all companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense Districts and all companies that have custody of crude oil or petroleum products originating from a PAD District and transported to the Panama Canal with the intent that the crude oil or petroleum products be further transported to another PAD District.

For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies that lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts are considered to have custody.

Respondents to Form EIA-819, "Monthly Oxygenate Report" include all operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations located in the 50 States and the District of Columbia.)

#### (3.) Collection

Survey data for the MPSRS are collected by facsimile, email, Internet using secure file transfer, and electronic transmission. All respondents must submit their data by the 20th calendar day following the end of the report month. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA by certified letter.

## (4.) Processing and Micro Editing

Upon receipt, all reported data are transformed into a standard format and sent through a log-in and prescreening process to validate respondent control information and resolve any discrepancies. The data are then processed using generalized edit and imputation procedures. Automated editing procedures check current data for consistency with past data and for internal consistency (e.g., totals equal to the sums of the parts). After the edit failures are resolved and imputation performed for nonrespondents, preliminary tables are produced and used to identify anomalies. These tables show U.S. and PAD District estimates for the current month and the prior 4 years. Anomalies

result in further review of respondent data which in turn may result in additional flagged data and imputation.

## (5.) Estimation and Imputation

TThe nine monthly supply surveys are census surveys. As such, the estimates using these data are the sum of the edited, reported data. Imputation is performed for companies that fail to file Forms EIA-22M, 810, 812, 813, 815, 816, and 819. For these companies, previous monthly values and values reported on the weekly survey forms are used if available. Data for nonrespondents to the Forms EIA-814 and 817 are not imputed because respondent-level data for these surveys are highly variable.

Adjustments are made to aggregate data from time to time. For example, unusual industry conditions, including fuel transitions, business practice shifts, or hurricane dislocations, may generate reporting anomalies and require adjustments. Measurement error and frame deficiencies may occasionally result in inconsistencies when individual respondent data are aggregated to publication levels and require adjustment. Monthly supply data are reviewed throughout the year and some estimates may be replaced with newly available or resubmitted respondent data in the *Petroleum Supply Annual (PSA)*.

## (6.) Macro Editing

Monthly data are compared to weekly data on a regular basis. Discrepancies between weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the EIA is performed on an ongoing basis. Results of selected data comparisons are published once a year in the feature article, "Comparison of Independent Statistics on Petroleum Supply." Additional comparisons are made between survey data and model results. Data reported in the Petroleum Supply Monthly and Petroleum Supply Annual are routinely imputed to correct for cases where comparison with other data suggests errors in survey data.

## (7.) Dissemination

The *PSM* data are normally released within 60 days of the close of the reference month. The *PSM* is available on the web at:

http://www.eia.gov/petroleum/supply/monthly/

Much of the *PSM* data are available on the web product, Petroleum Navigator. Petroleum Navigator provides an interface for accessing a comprehensive set of EIA's petroleum data. Features include: downloadable spreadsheets containing complete data history, data tables which "pivot" to present different perspectives, and selection boxes to easily change the product, area, process, period, and unit of measure. Petroleum Navigator can be accessed at: http://www.eia.gov/petroleum/data.cfm

#### C. Derived Data

Due to the time constraints in publishing monthly petroleum supply statistics and the desire to reduce industry response burden, some of the statistics published in the PSM are obtained from sources other than the monthly supply surveys. These other sources include models to data and data from supplemental sources such as the Bureau of the Census.

#### (1.) Domestic Crude Oil Production

The interim estimate of U.S., PAD District, and state oil production for the current reference month, published in Tables 1 through 26 of the PSM, are based on:

- (a.) crude oil production data from state government agencies and the Department of the Interior, Bureau of Safety and Environmental Enforcement;
- (b.) crude oil production data reported on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report." For some states, EIA uses current reported data from the state (chiefly Alaska). For the states of Arkansas, California, Colorado, Kansas, Louisiana, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Texas, Utah, West Virginia, Wyoming, and the Federal Gulf of Mexico, EIA calculates an estimate by modeling the relationship between final state-level data from DrillingInfo, a third-party vendor of well-level data collected by state agencies, and data reported on the EIA-914 survey using weighted least squares (WLS) linear regression. Additional explanation of the WLS estimation methodology is available. Estimates have to be made for crude oil production because complete and correct data from states may take from several months to over two vears.
- (c.) first purchase data reported on Form EIA-182 "Domestic Crude Oil First Purchase Report." For the remaining states and areas (Alabama, Arizona, Federal Pacific Offshore, Florida, Idaho, Illinois, Indiana, Kentucky, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New York, Oregon, South Dakota, Tennessee, and Virginia) EIA calculates an estimate by using the average lagged ratio (ALR) of the state reported data to EIA-182 data, applied to the current EIA-182 data. Additional explanation of the ALR estimation methodology is available.

State-level production estimates are published in Table 26, "Production of Crude Oil by PAD District and State." Table 26 contains estimates for crude oil production for state and federal offshore areas reported by state agencies and the Bureau of Safety and Environmental Enforcement or estimated by EIA using the ALR or WLS methods discussed above. Every month, the monthly crude oil production estimates are updated in Table 26 of the Petroleum Supply Monthly (http://www.eia.gov/petroleum/supply/monthly/) using reports from state agencies and the Bureau of Safety and Environmental Enforcement. The estimates are reported in the Petroleum

Navigator and the Petroleum Supply Monthly roughly 60 days after the production month.

## (2.) Exports

The U.S. Bureau of the Census compiles the official U.S. export statistics. Exporters are required to file a "Shipper's Export Declaration Document" with the U.S. Census Bureau. Each month the EIA receives aggregated export statistics from the U.S. Bureau of the Census (EM-522 and EM-594). Census export statistics used in the PSM reflect both government and non-governmental exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## (3.) Movements of crude oil by railroad

The volume of crude oil, ethanol, biodiesel, propane, propylene, normal butane, and isobutane moving by railroad is calculated using several data sources including Carload Waybill Sample (CWS) data from the U.S. Surface Transportation Board (STB), data from the National Energy Board of Canada (NEB), data in EIA's Oil and Gas Supply Module (OGSM) within the National Energy Modeling system (NEMS) for data prior to 2015, the EIA-915 survey starting in January 2015, and an estimation procedure developed by EIA for months in which data these data are not available.

Once the data necessary for calculating rail movements become available, which may take as long as 60 days after the end of a calendar quarter, EIA will revise the estimates made.

Movements of crude oil, ethanol, biodiesel, propane, propylene, normal butane, and isobutane by rail are based on EIA analysis of carload data from the STB CWS. Additional data from the NEB, OGSM, and the EIA-915 are used for estimating factors for converting carloads to barrels of crude oil. Carloads of ethanol, biodiesel, propane, propylene, normal butane, and isobutane are converted to barrels using data from the CWS.

Carload data from the STB are available approximately 60 days after the end of each quarter. For example, carload data for the first quarter of each year are typically available by about June 1. Therefore, recent-month rail movements reported by EIA in the Petroleum Supply Monthly and Petroleum Navigator are modeled based on historical rail movement averages, medians, or correlations of rail movements derived from actual carload data with other regional supply data collected by EIA or other sources including field production, imports, refinery and blender inputs, movements other than rail, exports, and supply adjustments.

Estimates of rail movements are subject to revision on a monthly basis as new, more complete, and more accurate data become available. Monthly revisions will typically affect data available through Petroleum Navigator on the EIA web site for the current year and up to two prior years. To the extent that revisions are needed to data more than 2 years in the past, these revisions will be made once a year at the time when Petroleum Navigator tables are updated with final data for a year from the Petroleum Supply Annual. Petroleum Supply Monthly and Petroleum Supply Annual tables released as PDF files will not be revised.

#### (4.) Stocks of Crude Oil held on Producing Sites (Lease Stocks)

The adjustment for lease stocks was discontinued beginning with PSM data for July 2016 released on September 30, 2016 because EIA discontinued reporting crude oil stocks held on producing sites (lease stocks). The lease stock adjustment remains in all historical EIA lease stocks data.

This adjustment corrects for incomplete survey coverage of companies that store crude oil on leases. Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states - Texas, New Mexico, and Montana. To calculate the "lease adjustment," a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the "lease adjustment" could no longer be calculated on a state basis and was changed to a PAD District level. To adjust for this incomplete coverage, 10,300 thousand barrels of crude oil are added to PAD District 3 stocks and 330 thousand barrels are added to PAD District 4 stocks.

# (5.) Trans-Alaska Pipeline System (TAPS) Natural Gas Plant Liquids (NGPL Adjustment)

The TAPS-NGPL adjustment corrects for overstatement of crude oil receipts and input at refineries due to NGPL injection into Alaskan crude oil transported in TAPS. Natural gas

processing plants in Alaska produce substantial volumes of NGPL that are added to crude oil transported through TAPS. Refiners have been unable to separate the volume of NGPL from Alaskan crude oil when reporting crude oil receipts and inputs to EIA. The TAPS-NGPL adjustment subtracts Alaskan NGPL production reported by selected gas processing plant operators from crude oil receipts and inputs reported by refiners. Adjusted NGPL production is added to refinery receipts and inputs of NGPL. The adjusted NGPL barrels are allocated to PAD Districts based on the regional distribution of receipts of Alaskan crude oil. Data most affected by the TAPS-NGPL adjustment are receipts and inputs of crude oil in PAD District 5 and receipts, inputs, and product supplied of butane and pentanes plus also in PAD District 5.

NGPL injections into crude oil transported in the TAPS started in 1987. The TAPS-NGPL adjustment was first applied to revised data reported in the Petroleum Supply Annual (PSA) for 1988.

#### (6.) Finished Motor Gasoline Adjustment

Adjustment quantities for finished motor gasoline are the sum of motor gasoline blending components, fuel ethanol, and methyl tertiary butyl ether (MTBE) adjustments reclassified to finished motor gasoline. Finished motor gasoline adjustment quantities are assumed to reflect gasoline blending activity that was not reported on surveys.

Note on MTBE Adjustment: The MTBE portion of the gasoline adjustment described in this section was only applied to Petroleum Supply Monthly (PSM) data for 2009. The MTBE portion of the gasoline adjustment was discontinued after further examination of the issue made clear the MTBE adjustment was not helpful in forming an accurate statistical representation of U.S. and regional gasoline supplies. The MTBE adjustment was not applied to gasoline supply and disposition data in years prior to 2009, nor was it applied to revised data for 2009 published in the Petroleum Supply Annual or in years after 2009. This note only applies to MTBE adjustments. MTBE blending that was reported on EIA surveys is reflected in U.S. and regional gasoline supply and disposition data. Other adjustments to gasoline supply and disposition data to account for motor gasoline blending components and fuel ethanol remain as described in this section.

Adjustment quantities for finished reformulated motor gasoline include adjustments for reformulated blendstock for oxygenate blending (RBOB) plus a percentage of gasoline treated as blendstock (GTAB), "other" motor gasoline blending components, fuel ethanol, and MTBE. The quantity of GTAB and "other" motor gasoline blending components adjustments reclassified to finished reformulated motor gasoline is based on the ratio of finished reformulated motor gasoline net production divided by total finished motor gasoline net production reported on surveys by refiners and blenders in each PAD District. Motor gasoline blending components adjustments reclassified to finished reformulated motor gasoline are further classified as blended with alcohol (i.e. fuel ethanol), blended with ether (i.e. MTBE), or non-oxygenated during 2009.

Starting with data for January 2010, motor gasoline blending component adjustment quantities were classified only as blended with fuel ethanol and "other". During 2009, RBOB adjustment quantities were classified based on the product description that included reference to the oxygenate to be blended. Beginning with data for January 2010, all RBOB is reported in one product category without reference to specific oxygenates, and all RBOB adjustment quantities are assumed blended with fuel ethanol. During 2009, adjustment quantities for GTAB and "other" motor gasoline blending components reclassified to finished reformulated gasoline were further classified as blended with ether, blended with alcohol, or non-oxygenated based on the ratio of production of these products in reported survey data. After determining adjustment quantities of motor gasoline blending components reclassified to each type of finished reformulated motor gasoline, portions of the fuel ethanol and MTBE adjustments were reclassified to reformulated motor gasoline. The fuel ethanol quantity reclassified to finished reformulated motor gasoline was determined using the ratio of fuel ethanol blended into finished motor gasoline calculated from fuel ethanol blending data reported on survey forms by PAD District. For example, if the calculated volumetric fuel ethanol blend ratio was 10%, then a quantity of the fuel ethanol adjustment sufficient to make a 10% blend with the available motor gasoline blending components is reclassified to finished reformulated motor gasoline, but the quantity of fuel ethanol cannot exceed the total quantity of the fuel ethanol adjustment. During 2009, a similar process was followed for allocating the MTBE adjustment to reformulated motor gasoline except the blend ratio was assumed to be 12% in all PAD Districts. Starting with data for January 2010, the entire MTBE adjustment quantity is assumed to be blended with finished conventional motor gasoline.

Adjustment quantities for finished conventional motor gasoline include adjustments for conventional blendstock for oxygenate blending (CBOB) plus the portion of GTAB, "other" motor gasoline blending components, fuel ethanol and MTBE adjustments that were not reclassified to finished reformulated motor gasoline. The total adjustment to finished conventional motor gasoline is further classified as finished conventional gasoline blended with fuel ethanol and "other" finished conventional motor gasoline. The quantity of the finished conventional motor gasoline adjustment reclassified as finished conventional motor gasoline blended with fuel ethanol is determined using the quantity of the fuel ethanol adjustment allocated to finished conventional motor gasoline and the fuel ethanol blend ratio calculated from fuel ethanol blending reported on surveys by PAD District. For example, if the fuel ethanol blend ratio calculated from survey data was 10% in a PAD District, then the total adjustment quantity of finished conventional motor gasoline in that PAD District would be 10 times the fuel ethanol adjustment quantity allocated to finished conventional gasoline (i.e. the adjustment to finished conventional motor gasoline blended with fuel ethanol includes 10% fuel ethanol and 90% gasoline from the motor gasoline blending components adjustment). The MTBE adjustment allocated to finished conventional motor gasoline is simply added to the adjustment for "other" finished conventional motor gasoline.

• Fuel ethanol adjustment quantities frequently exceed the volume of fuel ethanol needed to achieve a blend ratio implied by blending activity reported by refiners and blenders on surveys when considering only the gasoline barrels available from the motor gasoline blending components adjustment. In this case, "other" finished conventional motor gasoline is reclassified by the adjustment to finished conventional motor gasoline blended with alcohol in order to maintain an ethanol blend ratio equal to the fuel ethanol blend ratio reported by refiners and blenders in each PAD District.

#### (7.) Motor Gasoline Blending Components Adjustment

Adjustment quantities for motor gasoline blending components at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of imports and renewable fuels and oxygenate plant net production (i.e. motor gasoline blending components use as denaturant for fuel ethanol production). Adjustment quantities by PAD District equal the sum of stock change, refinery and blender net input, and exports minus the sum of imports, renewable fuels and oxygenate plant net production, and net receipts. Motor gasoline blending components adjustments are calculated for reformulated blendstock for oxygenate blending (RBOB), conventional blendstock for oxygenate blending (CBOB), gasoline treated as blendstock (GTAB), and "other" motor gasoline blending components. Product supplied for motor gasoline blending components is assumed to always equal zero because there is no end-user demand for motor gasoline blending components as anything other than finished motor gasoline. Motor gasoline blending components adjustment quantities are assumed to reflect finished motor gasoline blending implied by the supply and disposition balance but not reported on surveys. Adjustment quantities for motor gasoline blending components are reclassified to finished motor gasoline and added to the finished motor gasoline adjustment.

# (8.) Renewable Fuels including Fuel Ethanol Adjustment

Adjustment quantities for renewable fuels (including fuel ethanol) at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum

of renewable fuels and oxygenate plant net production and imports. Calculation of adjustment quantities by PAD District depends on the product. Individual products include fuel ethanol, biomass based diesel fuel (including biodiesel), "other" renewable diesel fuel, and "other" renewable fuels (e.g. bio-jet fuel). Product supplied for renewable fuels (including fuel ethanol) is assumed equal to zero. Adjustments for fuel ethanol and "other" renewable fuels are discussed separately below.

- Fuel ethanol adjustment quantities at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. There are no survey data available for rail movements of fuel ethanol between PAD Districts, and so allocation of fuel ethanol adjustments to PAD Districts is based on the ratio of fuel ethanol blending reported on surveys in each PAD District divided by fuel ethanol blending reported on surveys for the entire U.S. In this case, Fuel ethanol implied net receipts are calculated for each PAD District as the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production, imports, and adjustments. Fuel ethanol implied net receipts are the balancing item between total supply and disposition in each PAD District. Fuel ethanol adjustment quantities are assumed to reflect blending of fuel ethanol into finished motor gasoline that is implied by the available supply of fuel ethanol but not reported on surveys. Fuel ethanol adjustment volumes are reclassified to finished reformulated motor gasoline and finished conventional motor gasoline through finished motor gasoline adjustments.
- The product category called "renewable fuels except fuel ethanol" includes biomass-based diesel fuel (including biodiesel), "other" renewable diesel fuel, and "other" renewable fuels (e.g. bio-jet fuel). For PSM data prior to January 2012, renewable fuels except fuel ethanol adjustment quantities at the U.S. and PAD District levels were calculated as the sum of stock change, refinery and blender net input, and exports minus imports. Data for production of Renewable Fuels except Fuel Ethanol was unavailable and was excluded from Renewable Fuels and Oxygenate Plant Net Production. Therefore the calculation of adjustments to Renewable Fuels except Fuel Ethanol caused production to be included in the adjustment. Similarly, the calculation caused net inter-PAD District movements (i.e. net receipts) by rail and truck to also be included in adjustments to renewable fuels except fuel ethanol.
- Beginning with PSM data for January 2012, production of biodiesel reported on Form EIA-22M was included under the heading of "renewable fuels and oxygenate plant net production" in petroleum

supply and disposition balances for "renewable fuels except fuel ethanol". As a result, the adjustment for "renewable fuels except fuel ethanol" no longer includes production of biodiesel. This change will also be made to revised monthly data for January-December 2011 when the 2011 Petroleum Supply Annual is released.

 Biodiesel adjustment quantities at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. There are no survey data available for rail movements of biodiesel between PAD Districts, and so allocation of fuel biodiesel adjustments to PAD Districts is based on the ratio of biomass-based diesel blending reported on surveys in each PAD District divided by biomassbased diesel fuel blending reported on surveys for the entire U.S. Biodiesel implied net receipts are calculated for each PAD District as the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production, imports, and adjustments. Biodiesel implied net receipts are the balancing item between total supply and disposition in each PAD District. Biodiesel adjustment quantities are assumed to reflect blending of biodiesel into distillate fuel oil that is implied by the available supply of biodiesel but not reported as input on surveys. Biodiesel adjustment volumes are reclassified to distillate fuel oil (15 ppm sulfur and under) through distillate fuel oil adjustments.

# (9.) Distillate Fuel Oil Adjustment

Adjustment quantities for distillate fuel oil show reclassification by pipeline operators of distillate fuel oil with sulfur content of 15 ppm and under to distillate fuel oil with sulfur content greater than 15 ppm to 500 ppm (inclusive). Reclassification may occur when distillate product with sulfur content of 15 ppm and under becomes mixed with products having higher sulfur content during pipeline transportation, storage, or handling. Adjustment quantities are reported by pipeline operators on Form EIA-812 "Monthly Product Pipeline Report." This adjustment was discontinued after publication of data for December 2010

Beginning with PSM data for January 2012, distillate fuel oil adjustments equal the opposite of biodiesel adjustments described above in section 7. Biodiesel adjustments are added to distillate fuel oil (15 ppm sulfur and under) and to total distillate fuel oil. Distillate fuel oil adjustment quantities are assumed to reflect biodiesel blending activity implied by biodiesel supply and disposition but not reported on surveys. Distillate fuel oil adjustments for biodiesel will also be added to revised data for January-December 2011 when the 2011 Petroleum Supply Annual is released.

## (10.) Crude Oil Adjustment

Adjustment quantities for crude oil are derived to balance crude oil supply and disposition. Crude oil product supplied was equal to crude oil used directly as reported on Form EIA-813 "Monthly Crude Oil Report" in data through December 2009. Reporting crude oil used directly was discontinued on Form EIA-813 after collection of data for December 2009. Crude oil product supplied is assumed equal to zero beginning with data for January 2010. Undercounting crude oil imports in survey data is one example of a typical cause of crude oil adjustments. This results in a positive crude oil adjustment because crude oil disposition (i.e. the sum of stock change, refiner inputs, and exports) will exceed available supply (i.e. the sum of field production and imports) due to import undercounting. Crude oil losses are included in crude oil adjustment quantities. The crude oil adjustment was formerly called unaccounted-for crude oil. The name change was effective with data for January 2005.

#### (11.) Other Hydrocarbon Adjustment

Adjustment quantities for "other" hydrocarbons equal the sum of stock change, refinery and blender net inputs and exports minus imports. "Other" hydrocarbons product supplied is assumed equal to zero. Adjustment quantities account for "other" hydrocarbons produced outside of refineries. There are no movements data collected on surveys for "other" hydrocarbons. Therefore, adjustment quantities include any net receipts of "other" hydrocarbons resulting from inter-PAD District movements.

# (12.) Hydrogen Adjustment

Adjustment quantities for hydrogen equal refinery and blender net input of hydrogen. Hydrogen product supplied is assumed equal to zero. Adjustment quantities account for hydrogen supplied to U.S. refineries from non-refinery sources. There are no movements data collected on surveys for hydrogen. Therefore, adjustment quantities at the PAD District level include any net receipts of hydrogen resulting from inter-PAD District movements.

# (13.) Oxygenates (excluding fuel ethanol) Adjustment

Adjustment quantities for oxygenates (excluding fuel ethanol) equal the sum of stock change, refinery and blender net inputs, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. Product supplied for oxygenates (excluding fuel ethanol) is assumed equal to zero. Methyl tertiary butyl ether (MTBE) is the single largest component of oxygenates (excluding fuel ethanol).

## 3. Quality

#### A. General Discussion

# (1.) Response Rates

The response rate is generally 98 to 100 percent. Average response rates for the monthly and weekly surveys are published in the annual PSM article "Accuracy of Petroleum Supply Data." Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

## (2.) Non-sampling Errors

TThere are two types of errors usually associated with data produced from a survey; sampling errors and nonsampling errors. Because the estimates for the monthly surveys are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to nonsampling errors. Non-sampling errors may arise from a number of sources including: (1) the inability to obtain data from all companies in the frame (non-response) and the method used to account for non-response, (2) response errors, (3) differences in the interpretation of questions or definitions, (4) mistakes in recording or coding of the data obtained from respondents, and (5) other errors of collection, response, coverage, processing, and estimation

# (3.) Resubmissions

Throughout the year, EIA accepts data revisions of monthly data. If a revision to a monthly submission is made after the *PSM* has been published, it is referred to as a resubmission. The final monthly values for the previous year are published in the *PSA*. These values reflect all *PSM* resubmissions and other data corrections. The values contained in the *PSA* are EIA's most accurate measure of petroleum supply activity.

# (4.) Revision Policy

EIA will publish revised monthly crude oil production estimates going back to the Previously published Petroleum Supply Annual every month in the Petroleum Supply Navigator (http://www.eia.gov/petroleum/supply/monthly/). Once a year with the release of the Petroleum Supply Annual, EIA will revise up to 10 years of historical production estimates in the Petroleum Supply Navigator.

#### **B.** Data Assessment

The principal objective of the PSRS is to provide an accurate picture of petroleum industry activities and of the availability of petroleum products nationwide from primary distribution channels. The PSM preliminary monthly data serve as leading indicators of the final monthly data published in the PSA. The PSM monthly data are not expected to have the same level of accuracy as the final monthly data published in the PSA. However, the preliminary monthly data are expected to exhibit like trends and product flow characteristic of the final monthly data.

To assess the accuracy of monthly statistics, initial monthly estimates published in the PSM are compared with the final monthly aggregates published in the PSA. Although final monthly data are still subject to error, they have been thoroughly reviewed and edited, they reflect all revisions made during the year, and they are considered to be the most accurate data available. The mean absolute percent error provides a measure of the average revisions relative to the aggregates being measured for a variable. The mean absolute percent error for 2007 monthly data was less than 1 percent for 50 of the 66 major petroleum variables analyzed.

# 4. Provisions Regarding Disclosure of Information

All PSRS survey forms, with the exception of the Form EIA-814, "Monthly Imports Report," have the same general disclosure information statement. The information reported on Form EIA-814 will be considered "public information" and may be publicly released in company or individually identifiable form, and will not be protected from disclosure in identifiable form.

TThe information reported on Forms EIA-810 through 813, 815 through 817, 819, and 820 will be protected and not disclosed to the

public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Department of Energy (DOE) regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905. The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another DOE component; to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation procedures are not applied to the statistical data published from this survey's information. Thus, there may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to estimate the information reported by a specific respondent.

In addition to the use of the information by EIA for statistical purposes, the information may be made available, upon request, to other Federal agencies authorized by law to receive such information for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Company specific data are also provided to other DOE offices for the purpose of examining specific petroleum operations in the context of emergency response planning and actual emergencies.

# Appendix D

# **Northeast Reserves**

Reserves inventories are not considered to be in the commercial sector and are excluded from EIA's commercial motor gasoline and distillate fuel oil supply and disposition statistics, such as those reported in the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week In Petroleum*.

# Northeast Home Heating Oil Reserve classified as ultra-low sulfur distillate (15 parts per million)

Terminal Operator	Location	Thousand Barrels
Buckeye Partners LP	Port Reading, NJ	300
Buckeye Partners LP	Groton, CT	300
Global Companies LLC	Revere, MA	400

Source: U. S. Energy Information Administration

# Northeast Regional Refined Petroleum Product Reserve motor gasoline products

Terminal Operator	Location	Thousand Barrels
BP Products North America	Carteret, NJ	200
Buckeye Terminals LLC	Port Reading, NJ	0
Buckeye Terminals LLC	Raritan Bay, NJ	500
Global Companies LLC	Revere, MA	200
South Portland Terminal LLC	South Portland, ME	99

Source: U. S. Energy Information Administration

Other reserves information from the U.S. Department of Energy, Office of Petroleum Reserves can be found at http://energy.gov/fe/services/petroleum-reserves/

# State of New York's Strategic Fuels Reserve Program

State reserve inventories are also not considered to be in the commercial sector and are excluded from EIA's commercial inventories and are excluded from supply and disposition statistics, such as those reported in the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week In Petroleum*.

Product	Location	Thousand Barrels
Motor Gasoline Blending Components	NY	58
Fuel Ethanol	NY	10
Distillate Fuel Oil, 15 ppm Sulfur and Under	NY	34

Source: New York State Energy Research & Development Authority

# **Definitions of Petroleum Products and Other Terms**

(Revised May 2010)

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH3-(CH2)n-OH (e.g., methanol, ethanol, and tertiary butyl alcohol).

*Alkylate.* The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

**Alkylation.** A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

All Other Motor Gasoline Blending Components. See Motor Gasoline Blending Components.

**API Gravity.** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

Degrees 
$$API = \frac{141.5}{sp. gr. (@ 60^{\circ} F)} - 131.5$$

The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.

**Aromatics.** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

**Asphalt.** A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing; used primarily for road construction. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. Note: The conversion factor for asphalt is 5.5 barrels per short ton.

**ASTM.** The acronym for the American Society for Testing and Materials.

Atmospheric Crude Oil Distillation. The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees Fahrenheit to 750 degrees Fahrenheit (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

Aviation Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating

engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. Note: Data on blending components are not counted in data on finished aviation gasoline.

Aviation Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.

**Barrel.** A unit of volume equal to 42 U.S. gallons.

Barrels Per Calendar Day. The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation (see Barrels per Stream Day) to account for the following limitations that may delay, interrupt, or slow down production:

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and

the reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns

**Barrels Per Stream Day.** The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

**Benzene** ( $C_6H_6$ ). An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

**Biomass-Based Diesel Fuel.** Biodiesel and other renewable diesel fuel or diesel fuel blending components derived from biomass, but excluding renewable diesel fuel coprocessed with petroleum

feedstocks.

Blending Components. See Motor or Aviation Gasoline Blending Components.

**Blending Plant.** A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

**Bonded Petroleum Imports.** Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

**BTX.** The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

**Bulk Station.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

**Bulk Terminal.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

**Butane** ( $C_4H_{10}$ ). A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes normal butane and refinery-grade butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

**Normal Butane** ( $C_4H_{10}$ ). A normally gaseous straight-chain hydrocarbon that is a colorless paraffinic gas which boils at a temperature of 31.1 degrees Fahrenheit and is extracted from natural gas or refinery gas streams.

**Refinery-Grade Butane** ( $C_4H_{10}$ ). A refinery-produced stream that is composed predominantly of normal butane and/or isobutane and may also contain propane and/or natural gasoline. These streams may also contain significant levels of olefins and/or fluorides contamination.

**Butylene** ( $C_4H_8$ ). An olefinic hydrocarbon recovered from refinery processes.

*Captive Refinery Oxygenate Plants.* Oxygenate production facilities located within or adjacent to a refinery complex.

*Catalytic Cracking.* The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

*Fresh Feeds.* Crude oil or petroleum distillates which are being fed to processing units for the first time.

**Recycled Feeds.** Feeds that are continuously fed back for additional processing.

*Catalytic Hydrocracking.* A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

Catalytic Hydrotreating. A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

Catalytic Reforming. A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

*Low Pressure.* A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

*High Pressure.* A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

**Charge Capacity.** The input (feed) capacity of the refinery processing facilities.

*Coal.* A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Commercial Kerosene-Type Jet Fuel. See Kerosene-Type Jet Fuel.

Conventional Blendstock for Oxygenate Blending (CBOB). See Motor Gasoline Blending Components.

Conventional Gasoline. See Motor Gasoline (Finished).

*Crude Oil.* A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include:

Small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included;

Small amounts of nonhydrocarbons produced from oil, such as sulfur and various metals;

Drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude oil is considered as either domestic or foreign, according to the following:

**Domestic.** Crude oil produced in the United States or from its Aouter continental shelf' as defined in 43 USC 1331.

*Foreign.* Crude oil produced outside the United States. Imported Athabasca hydrocarbons (tar sands from Canada) are included.

*Crude Oil, Refinery Receipts.* Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

*Crude Oil Losses.* Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

*Crude Oil Production.* The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

*Crude Oil Qualities.* Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

**Delayed Coking.** A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

**Desulfurization.** The removal of sulfur, as from molten metals, petroleum oil, or flue gases. Petroleum desulfurization is a process that removes sulfur and its compounds from various streams during the refining process. Desulfurization processes include catalytic hydrotreating and other chemical/physical processes such

as adsorption. Desulfurization processes vary based on the type of stream treated (e.g., naphtha, distillate, heavy gas oil, etc.) and the amount of sulfur removed (e.g., sulfur reduction to 10 ppm). See *Catalytic Hydrotreating*.

**Disposition.** The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Distillate Fuel Oil.** A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

*No. 1 Distillate.* A light petroleum distillate that can be used as either a diesel fuel or a fuel oil.

No. 1 Diesel Fuel. A light distillate fuel oil that has a distillation temperature of 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high speed diesel engines generally operated under frequent speed and load changes, such as those in city buses and similar vehicles. See No. 1 Distillate.

**No. 1 Fuel Oil.** A light distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used primarily as fuel for portable outdoor stoves and portable outdoor heaters. See **No. 1 Distillate.** 

*No. 2 Distillate.* A petroleum distillate that can be used as either a diesel fuel or a fuel oil.

No. 2 Diesel Fuel. A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines that are generally operated under uniform speed and load conditions, such as those in railroad locomotives, trucks, and automobiles. See No. 2 Distillate.

Low Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level no higher than 0.05 percent by weight. It is used primarily in motor vehicle diesel engines for on-highway use.

*High Sulfur No. 2 Diesel Fuel.* No. 2 diesel fuel that has a sulfur level above 0.05 percent by weight.

No. 2 Fuel Oil (Heating Oil). A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in

atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See *No. 2 Distillate*.

**No. 4 Fuel.** A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms to ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low-and medium-speed diesel engines and conforms to ASTM Specification D 975.

No. 4 Diesel Fuel. See No. 4 Fuel.

No. 4 Fuel Oil. See No. 4 Fuel.

*Electricity (Purchased).* Electricity purchased for refinery operations that is not produced within the refinery complex.

Ending Stocks. Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

ETBE (Ethyl tertiary butyl ether) (CH<sub>3</sub>)<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

**Ethane** ( $C_2H_6$ ). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of - 127.48 degrees Fahrenheit. It is extracted from natural gas and refinery gas streams.

*Ether.* A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

**Ethylene** ( $C_2H_4$ ). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes. Ethylene is used as a petrochemical feedstock for numerous chemical applications and the production of consumer goods.

*Exports.* Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Field Production.** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

Flexicoking. A thermal cracking process which converts heavy

hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

*Fluid Coking.* A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

**Fresh Feed Input.** Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

## Examples:

- (1.) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.
- (2.) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

**Fuel Ethanol** ( $C_2H_5OH$ ). An anhydrous alcohol (ethanol with less than 1% water) intended for gasoline blending as described in Oxygenates definition.

**Fuels Solvent Deasphalting.** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

*Gas Oil.* A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

*Gasohol.* A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration of 10 percent or less by volume. Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside carbon monoxide nonattainment areas are included in data on oxygenated gasoline. See *Oxygenates*.

*Gasoline Blending Components.* Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Gasoline Treated as Blendstock (GTAB). See Motor Gasoline Blending Components.

Gross Input to Atmospheric Crude Oil Distillation Units. Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Heavy Gas Oil. Petroleum distillates with an approximate boiling

range from 651 degrees Fahrenheit to 1000 degrees Fahrenheit.

*High-Sulfur Distillate Fuel Oil.* Distillate fuel oil having sulfur content greater than 500 ppm.

*Hydrogen.* The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

*Idle Capacity.* The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

Imported Crude Oil Burned As Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

*Imports.* Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Isobutane** ( $C_4H_{10}$ ). A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams.

**Isobutylene** ( $C_4H_8$ ). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Isohexane** ( $C_6H_{14}$ ). A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2 degrees Fahrenheit.

**Isomerization.** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane  $(C_4)$ , an alkylation process feedstock, and normal pentane and hexane into isopentane  $(C_5)$  and isohexane  $(C_6)$ , high-octane gasoline components.

# Isopentane. See Natural Gasoline and Isopentane.

*Kerosene.* A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. See *Kerosene-Type Jet Fuel*.

*Kerosene-Type Jet Fuel.* A kerosene-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbojet and turboprop aircraft engines.

*Commercial.* Kerosene-type jet fuel intended for use in commercial aircraft.

*Military.* Kerosene-type jet fuel intended for use in military aircraft

**Lease Condensate.** A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease separation facilities. This category excludes natural gas liquids, such as butane and propane, which are recovered at downstream natural gas processing plants or facilities. See **Natural Gas Liquids**.

*Light Gas Oils.* Liquid Petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees Fahrenheit to 650 degrees Fahrenheit.

Liquefied Petroleum Gases (LPG). A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation. They include: ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

**Low-Sulfur Distillate Fuel Oil.** Distillate fuel oil having sulfur content greater than 15 ppm to 500 ppm. Low sulfur distillate fuel oil also includes product with sulfur content equal to or less than 15 ppm if the product is intended for pipeline shipment and the pipeline has a sulfur specification below 15 ppm.

**Lubricants.** Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Lubricants include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases.

**Merchant Oxygenate Plants.** Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

*Methanol (CH<sub>3</sub>OH).* A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

*Middle Distillates.* A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

# Military Kerosene-Type Jet Fuel. See Kerosene-Type Jet Fuel.

Miscellaneous Products. Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils). Note:

Beginning with January 2004 data, naphtha-type jet fuel is included in Miscellaneous Products.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10 percent recovery point to 365 to 374 degrees Fahrenheit at the 90 percent recovery point. "Motor Gasoline" includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline. Note: E85 is included only in volumetric data on finished motor gasoline production and other components of product supplied.

**Conventional Gasoline.** Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. Note: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

*Ed 55 and Lower.* Finished conventional motor gasoline blended with a maximum of 55 volume percent denatured fuel ethanol.

*Greater than Ed55.* Finished conventional motor gasoline blended with denatured fuel ethanol where the volume percent of denatured fuel ethanol exceeds 55%.

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area.

Oxygenated Gasoline (Including Gasohol). Oxygenated gasoline includes all finished motor gasoline, other than reformulated gasoline, having oxygen content of 2.0 percent or higher by weight. Gasohol containing a minimum 5.7 percent ethanol by volume is included in oxygenated gasoline. Oxygenated gasoline was reported as a separate product from January 1993 until December 2003 inclusive. Beginning with monthly data for January 2004, oxygenated gasoline is included in conventional gasoline. Historical data for oxygenated gasoline excluded Federal Oxygenated Program Reformulated Gasoline (OPRG). Historical oxygenated gasoline data also excluded other reformulated gasoline with a seasonal oxygen requirement regardless of season

**Reformulated Gasoline.** Finished gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. It includes gasoline produced to meet or exceed emissions performance and benzene content standards of federal-program reformulated gasoline even though the gasoline

may not meet all of the composition requirements (e.g., oxygen content) of federal-program reformulated gasoline. Note: This category includes Oxygenated Fuels Program Reformulated Gasoline (OPRG). Reformulated gasoline excludes Reformulated Blendstock for Oxygenate Blending (RBOB) and Gasoline Treated as Blendstock (GTAB).

**Reformulated** (Blended with Alcohol). Reformulated gasoline blended with an alcohol component (e.g., fuel ethanol) at a terminal or refinery to raise the oxygen content.

**Reformulated** (Blended with Ether). Reformulated gasoline blended with an ether component (e.g., methyl tertiary butyl ether) at a terminal or refinery to raise the oxygen content.

**Reformulated** (Non-Oxygenated). Reformulated gasoline without added ether or alcohol components.

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components, and oxygenates when required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components. Naphthas (e.g., straightrun gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: Oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Conventional Blendstock for Oxygenate Blending (CBOB). Conventional gasoline blendstock intended for blending with oxygenates downstream of the refinery where it was produced. CBOB must become conventional gasoline after blending with oxygenates. Motor gasoline blending components that require blending other than with oxygenates to become finished conventional gasoline are reported as All Other Motor Gasoline Blending Components. Excludes reformulated blendstock for oxygenate blending (RBOB).

Gasoline Treated as Blendstock (GTAB). Non-certified Foreign Refinery gasoline classified by an importer as blendstock to be either blended or reclassified with respect to reformulated or conventional gasoline. GTAB was classified on EIA surveys as either reformulated or conventional based on emissions performance and the intended end use in data through the end of December 2009. Designation of GTAB as reformulated or conventional was discontinued beginning with data for January 2010. GTAB was reported as a single product beginning with data for January 2010. GTAB data for January 2010 and later months is presented as conventional

motor gasoline blending components when reported as a subset of motor gasoline blending components.

Reformulated Blendstock for Oxygenate Blending (RBOB). Specially produced reformulated gasoline blendstock intended for blending with oxygenates downstream of the refinery where it was produced. Includes RBOB used to meet requirements of the Federal reformulated gasoline program and other blendstock intended for blending with oxygenates to produce finished gasoline that meets or exceeds emissions performance requirements of Federal reformulated gasoline (e.g., California RBOB and Arizona RBOB). Excludes conventional gasoline blendstocks for oxygenate blending (CBOB).

**RBOB** for Blending with Alcohol. Motor gasoline blending components intended to be blended with an alcohol component (e.g., fuel ethanol) at a terminal or refinery to raise the oxygen content. RBOB product detail by type of oxygenate was discontinued effective with data for January 2010. Beginning with data for January 2010, RBOB was reported as a single product.

RBOB for Blending with Ether. Motor gasoline blending components intended to be blended with an ether component (e.g., methyl tertiary butyl ether) at a terminal or refinery to raise the oxygen content. RBOB product detail by type of oxygenate was discontinued effective with data for January 2010. Beginning with data for January 2010, RBOB was reported as a single product.

All Other Motor Gasoline Blending Components. Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. Includes receipts and inputs of Gasoline Treated as Blendstock (GTAB). Excludes conventional blendstock for oxygenate blending (CBOB), reformulated blendstock for oxygenate blending, oxygenates (e.g. fuel ethanol and methyl tertiary butyl ether), butane, and pentanes plus.

MTBE (Methyl tertiary butyl ether)  $(CH_3)_3COCH_3$ . An ether intended for gasoline blending as described in Oxygenate definition.

*Naphtha.* A generic term applied to a petroleum fraction with an approximate boiling range between 122 degrees Fahrenheit and 400 degrees Fahrenheit.

Naphtha Less Than 401° F. See Petrochemical Feedstocks.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees Fahrenheit, and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds. Note: Beginning with January 2004 data, naphtha-type jet fuel is included in *Miscellaneous Products*.

**Natural Gas.** A gaseous mixture of hydrocarbon compounds, the primary one being **methane**.

**Natural Gas Field Facility.** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

Natural Gas Liquids. Those hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption, or other methods in gas processing or cycling plants. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as lease condensate, natural gasoline, and liquefied petroleum gases. Natural gas liquids include natural gas plant liquids (primarily ethane, propane, butane, and isobutane; see Natural Gas Plant Liquids) and lease condensate (primarily pentanes produced from natural gas at lease separators and field facilities; see Lease Condensate).

Natural Gas Plant Liquids. Those hydrocarbons in natural gas that are separated as liquids at natural gas processing plants, fractionating and cycling plants, and, in some instances, field facilities. Lease condensate is excluded. Products obtained include ethane; liquefied petroleum gases (propane, butanes, propane-butane mixtures, ethane-propane mixtures); isopentane; and other small quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

Natural Gas Processing Plant. Facilities designed to recover natural gas liquids from a stream of natural gas that may or may not have passed through lease separators and/or field separation facilities. These facilities control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

**Natural Gasoline and Isopentane.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon,  $(C_3H_{12})$ , obtained by fractionation of natural gasoline or isomerization of normal pentane.

*Net Receipts.* The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

Normal Butane. See Butane.

*OPEC.* An intergovernmental organization whose stated objective is to coordinate and unify petroleum policies of member countries. It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969-present), Angola (2007-present), Ecuador (1973-1992 and 2007-present), Gabon (1975-1994 and July, 2016-present), Indonesia (1962-2008 and January, 2016-November, 2016), Iran (1960-present), Iraq (1960-present), Kuwait (1960-present), Libya (1962-present), Nigeria (1971-present), Qatar (1961-present), Saudi Arabia (1960-present), United Arab Emirates (1967-present), and Venezuela (1960-present).

*Operable Capacity*. The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

**Operable Utilization Rate.** Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

*Operating Capacity.* The component of operable capacity that is in operation at the beginning of the period.

**Operating Utilization Rate.** Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

**Other Hydrocarbons.** Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives and gilsonite. Excludes natural gas used for fuel or hydrogen feedstock.

Other Oils Equal To or Greater Than 401° F. See Petrochemical Feedstocks.

*Other Oxygenates.* Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Oxygenated Gasoline. See Motor Gasoline (Finished).

*Oxygenates.* Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Fuel Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

**Fuel Ethanol.** Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the "gasohol waiver").

**Methanol.** Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the "ARCO" waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the "DuPont" waiver).

*MTBE* (*Methyl tertiary butyl ether*). Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that

the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the "Sun" waiver).

**Pentanes Plus.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

**Persian Gulf.** The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates

**Petrochemical Feedstocks.** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha Less Than 401° F" and "Other Oils Equal To or Greater Than 401° F."

*Naphtha Less Than 401° F.* A naphtha with a boiling range of less than 401 degrees Fahrenheit that is intended for use as a petrochemical feedstock.

Other Oils Equal To or Greater Than 401° F. Oils with a boiling range equal to or greater than 401 degrees Fahrenheit that are intended for use as a petrochemical feedstock.

**Petroleum Administration for Defense (PAD) Districts.** Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

**Petroleum Coke.** A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton. Coke from petroleum has a heating value of 6.024 million Btu per barrel.

Catalyst Coke. In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

*Marketable Coke.* Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Pipeline (Petroleum).** Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

**Plant Condensate.** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Processing Gain.** The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

**Processing Loss.** The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

**Product Supplied, Crude Oil.** Crude oil burned on leases and by pipelines as fuel.

**Production Capacity.** The maximum amount of product that can be produced from processing facilities.

**Products Supplied.** Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

**Propane** ( $C_3H_8$ ). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of - 43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene**  $(C_3H_6)$ . An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Propylene**  $(C_3H_6)$  (nonfuel use). Propylene that is intended for use in nonfuel applications such as petrochemical manufacturing. Nonfuel use propylene includes chemical-grade propylene, polymer-grade propylene, and trace amounts of propane. Nonfuel use propylene also includes the propylene component of propane/propylene mixes where the propylene will be separated from the mix in a propane/propylene splitting process. Excluded is the propylene component of propane/propylene mixes where the propylene component of the mix is intended for sale into the fuel market.

**Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

Refinery-Grade Butane. See Butane.

**Refinery Input, Crude Oil.** Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

**Refinery Input, Total.** The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.

**Refinery Production.** Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. Refinery production of unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input.

Refinery Yield. Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished motor gasoline. Before calculating the yield for finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

Reformulated Blendstock for Oxygenate Blending (RBOB). See Motor Gasoline Blending Components.

Reformulated Gasoline. See Motor Gasoline (Finished).

**Renewable Fuels (Other).** Fuels and fuel blending components, except biomass-based diesel fuel, renewable diesel fuel, and fuel ethanol, produced from renewable biomass.

**Residual Fuel Oil.** A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

**Residuum.** Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000 degrees Fahrenheit.

**Road Oil.** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Shell Storage Capacity. The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity. Special Naphthas. All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

**Steam (Purchased).** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

**Still Gas (Refinery Gas).** Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

**Stock Change.** The difference between stocks at the beginning of the reporting period and stocks at the end of the reporting period. Note: A negative number indicates a decrease (i.e., a drawdown) in stocks and a positive number indicates an increase (i.e., a buildup) in stocks during the reporting period.

**Strategic Petroleum Reserve (SPR).** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Sulfur. A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off- highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

**Supply.** The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

TAME (Tertiary amyl methyl ether)  $(CH_3)_2(C_2H_5)COCH_3$ . An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

**Tank Farm.** An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

**Tanker and Barge.** Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal

to a PAD District.

**TBA** (*Tertiary butyl alcohol*) (*CH*<sub>3</sub>)<sub>3</sub>*COH*. An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

**Thermal Cracking.** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

**Toluene** ( $C_6H_5CH_3$ ). Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

*Ultra-Low Sulfur Distillate Fuel Oil.* Distillate fuel oil having sulfur content of 15 ppm or lower. Ultra-low sulfur distillate fuel oil that will be shipped by pipeline must satisfy the sulfur specification of the shipping pipeline if the pipeline specification is below 15 ppm. Distillate fuel oil intended for pipeline shipment that fails to meet a pipeline sulfur specification that is below 15 ppm will be classified as low-sulfur distillate fuel oil.

Unaccounted for Crude Oil. Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

*Unfinished Oils.* All oils requiring further processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of crude oil and include naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

*Unfractionated Streams.* Mixtures of unsegregated natural gas liquid components excluding, those in plant condensate. This product is extracted from natural gas.

*United States*. The United States is defined as the 50 States and the District of Columbia.

**Vacuum Distillation.** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

*Visbreaking.* A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

**Wax.** A solid or semi-solid material at 77 degrees Fahrenheit consisting of a mixture of hydrocarbons obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in which the straight-chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point

(ASTM D 938) between 80 (or 85) and 240 degrees Fahrenheit and a maximum oil content (ASTM D 3235) of 50 weight percent.

Working Storage Capacity. The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

*Xylene*  $(C_6H_4(CH_3)_2)$ . Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.